THE RAILWAY GAZETTE
A Journal of Management, Engineering and Operation
INCORPORATING
The Railway Engineer · TRANSPORT · The Railway News
The Railway Times · Herapath's Railway Journal ESTABLISHED 1835 · THE RAILWAY RECORD.
RAILWAYS ILLUSTRATED · THE RAILWAY OFFICIAL GAZETTE

PUBLISHED EVERY FRIDAY
AT
33, TOTHILL STREET, WESTMINSTER, LONDON, S.W.1
Telegraphic Address: "TRAZETTE PARL., LONDON"
Telephone No.: WHITEHALL 9233 (12 lines)

*Branch Offices:*
GLASGOW: 87, UNION STREET
*Telephone: Central 4646*
NEWCASTLE-ON-TYNE: 4, ROYAL ARCADE, PILGRIM STREET
*Telephone: Newcastle-on-Tyne 22239*
MANCHESTER: CENTURY HOUSE, ST. PETER'S SQUARE
*Telephone: Central 3101*
BIRMINGHAM: 81, EDMUND STREET
*Telephone: Central 3049*

**Annual subscription payable in advance and postage free**
**British Isles and Abroad .....£2 5s. 0d.**
**Single Copies .....One Shilling**
**Registered at the General Post Office, London, as a Newspaper**

VOL. 90 NO. 19 FRIDAY, MAY 13, 1949

## CONTENTS

| | PAGE |
|---|---|
| Editorial Notes | 513 |
| Lord Portal | 515 |
| Transport and Traders | 515 |
| Rapid Transit | 515 |
| British Transport Commission Traffic Receipts | 516 |
| America Fears Nationalisation | 516 |
| South African Railways & Harbours | 516 |
| Letters to the Editor | 518 |
| Scrap Heap | 520 |
| Overseas Railway Affairs—South Africa, East Africa, Rhodesia, Canada, Belgium, U.S.S.R., Hungary | 521 |
| The History, Present Situation, and Prospects of the East African Railways | 523 |
| Experimental Shunting Locomotive on the Norfolk & Western Railway, U.S.A. | 525 |
| Civil Engineer's Mechanical Equipment, Western Region | 528 |
| Personal | 531 |
| Sir Cyril Hurcomb on Trade and Transport | 534 |
| Beyer, Peacock & Co. Ltd. | 535 |
| Brush Electrical Engineering Co. Ltd. | 536 |
| Canadian Pacific Railway Company | 537 |
| Notes and News | 538 |

**Transport Administration in Tropical Dependencies**

By George V. O. Bulkeley, C.B.E., M.I.Mech.E.

With Chapters on Finance, Accounting, and Statistical Method
IN COLLABORATION WITH
Ernest J. Smith, F.C.I.S.
(formerly Chief Accountant, Nigerian Government Railway)

190 *pages* *Medium 8vo.* *Full cloth*

**PRICE 20 SHILLINGS**

**THE RAILWAY GAZETTE**
33, TOTHILL STREET, WESTMINSTER, S.W.1.

### How to Make "Your Railways" Pay

ONE of the speakers at the N.U.R. signalmen's conference at Southport said: "I suggest that if the Railway Executive cannot see their way to give us a rise without increasing rates and charges they should take something from the £27,000,000 which is being paid to the coupon clipping parasites under the guaranteed dividend on transport stocks." The "coupon clipping parasites," formerly known as railway stockholders, have already had a great deal taken from them. To take an example. A holder of £3,000 G.W.R. ordinary stock for the year 1947 received £218 gross in dividends. The same stockholder on his £5,136 L.M.S.R. ordinary stock received £251 gross in dividends—total income £469. Under the Transport Act the £3,000 G.W.R. stock and £5,136 L.M.S.R. stock were converted into £3,287 British Transport 3 per cent. guaranteed stock, and for 1948 the same stockholder received £98 12s. 0d. gross, a reduction in income of £370 8s. 0d. This example shows that the stockholders have more than "done their bit." To save British Railways and British trade, rates and fares must be reduced. To make this possible there should be a voluntary reduction in all salaries and wages from the British Transport Commission downwards. A reduction of 20 per cent. in all salaries above £1,000 and of 10 per cent. in all salaries and wages up to £1,000 would be a graceful gesture in the national interests and save £35 million per annum.

* * * *

### Cost of the Coal-Oil Conversion Muddle

The report of the Comptroller & Auditor General on the Civil Appropriations Account, 1947-48 (Stationery Office, 2s.), throws some further light on the muddle and waste which resulted from the decision of the Ministry of Transport, in 1946, to convert 1,200 locomotives from coal to oil firing. The idea of the scheme was to save one million tons of coal a year, but by September, 1947, when 93 engines had been, or were being, converted, the Ministry was warned that the 840,000 tons of oil which would be required each year to fulfil the programme might not be available, and work was stopped on the locomotives. At the beginning of 1948, the British Transport Commission reported that the 93 converted engines would cost the railways £279,000 more a year to run, and that the 1,200 engines would add £3,500,000 a year to railway costs. The scheme was abandoned last May. The oil-fired engines are to be reconverted at a cost of £200 each. The care and maintenance of the storage depots will cost the Ministry £11,000 a year to start with and later £10,000 a year. The position is to be reviewed in October. Up to November, 1948, the Ministry estimated its total expenditure on the scheme at some £3,000,000.

* * * *

### A £16,000,000 Mystery Solved

In our May 7 and May 28 issues last year we referred to an adjustment of £16,000,000, which was part of the net loss to the Exchequer on the operation of the railways during control by the Ministry of Transport. No details were available as to the reason for this adjustment, but in the report of the Comptroller & Auditor General the mystery is solved. In December, 1947, an agreement was reached between the Ministry of Transport and the British Transport Commission covering the main items falling for settlement on the transfer of the railways. The B.T.C. receives £35,400,000 in respect of abnormal wear and tear of assets during control; £6,700,000 in respect of deferred repairs to requisitioned privately-owned wagons; and £3,500,000 as consideration for additional cost incurred by the railways in the replacement of wagon sheets of inferior wartime manufacture. The above sums, £45,600,000 in all, have been discharged as to £16,000,000 by a special adjustment in the net revenue account of the undertakings for 1947, and as to £29,600,000 by the release to the B.T.C. of a reserve for contingent liabilities, including deferred wagon repairs and abnormal wear and tear of railway assets, created during the control by charges on the revenue accounts. The Minister receives £9,000,000 for railway works constructed at the Ministry's expense, being 70 per cent. of their depreciated first

cost, and £9,300,000 representing the cost, less depreciation, of wagons constructed at the State's expense and delivered up to December 31, 1947. Under a further agreement recently concluded the Commission is to pay the Ministry £1,500,000 for 558 "austerity" locomotives, built for the War Department and returned to this country as surplus after hostilities.

* * * *

**British Railway Investments in Colombia**

The total amount of British capital invested in Colombia is given by our contemporary *The South American Journal* as £5,334,047 at the end of 1948. The average return was 3·8 per cent. and £1,143,647 received no interest at all. There are only three British-owned railways operating in Colombia, and of these the Barranquilla Railway & Pier Company has sold its railway to the Government, and is now more in the nature of a trust company receiving instalments of the purchase price; the Colombia Railways & Navigation has ceased all transport operations. Only the Dorada still operates a railway; in 1948 it was able to pay its debenture interest, and a dividend of 3½ per cent. free of tax, compared with 4 per cent. tax free in 1947. The total amount of British capital invested in railways in Colombia is given as £1,744,008, on which interest amounting to £48,195, or 2·7 per cent., was received last year. The amount of capital receiving no interest was £953,074.

* * * *

**Overseas Railway Traffics**

Operating revenues of both the Canadian National and Canadian Pacific railways made further advances during March, but after taking into account the substantial increases in working expenses, net revenue fell below that for the same period of 1948. Canadian National operating revenues were up by £696,250, at £10,359,000, and operating expenses advanced by £1,194,500, to £10,147,750; net revenue was £211,250, as compared with £709,500 last year. The decrease in Canadian Pacific net earnings was £188,000, at £203,500, and the working expenses at £7,519,250 were up by £824,250. C.P.R. aggregate net earnings for the current seventeen weeks amount to £79,750, a decrease of £254,000, and on the C.N.R. net revenue has fallen by £921,250, to £535,000. At the close of the financial year, Gold Coast traffics amounted to £2,651,667 and made a total advance of £634,995 over receipts of the previous year; traffics during March were better by £57,662, at £267,847.

* * * *

**Serious Situation of the Canadian Pacific**

As Mr. W. A. Mather, President of the Canadian Pacific Railway, told the shareholders at the recent annual meeting of the company in Montreal, the net earnings were the lowest for any year since 1905 despite record high gross earnings. It is as important to Canada as to the Canadian Pacific that the company's revenues should enable it to keep abreast of the development of the country, yet there is now the paradox that inadequate returns force the company to restrict expenditure on necessary modernisation while the nation in general is experiencing a period of expansion similar to that of the early 1900s. It is fallacious to assume that satisfactory income from "other sources" precludes troubling about returns from railway operations, for some "other income" in past years has not been so satisfactory as at present. The raising of the income tax rate from 30 per cent. to 33 per cent. means that much more will have to be paid in taxes before dividend provision is made. The 15 per cent. tax on passenger fares has been removed, but the estimated benefit will be nullified by an Order of the Transport Commissioners abolishing the so-called "Mountain Differential" rate which has applied hitherto to certain traffic within, and to and from, British Columbia. No doubt these and other difficulties with which the company has to contend will be realised by the Royal Commission on Transportation appointed last year, and it is to be hoped that it will recommend to Parliament measures which will enable the Canadian Pacific, which has ably served Canada for seven decades in good and bad times, to share more fully in the present prosperity of the nation.

**Public Relations in Transport**

The public relations and publicity aspects of the British nationalised transport system attract a good deal of attention. Various attempts have been made to explain exactly what are the functions of public relations and publicity, particularly as applied to transport, and recently the organisation of the Railway Executive in this respect has been rearranged and standardised. Mr. J. H. Brebner, Chief Public Relations & Publicity Officer of the British Transport Commission, was formerly with the London Passenger Transport Board, and it is perhaps natural that when he addressed the National Association of Local Government Officers on Saturday last, he instanced the London Transport organisation to illustrate the title of his speech, which was "Public Relations in Action." The organisation there is divided into three separate divisions or offices: the Public Relations Office, the Press & Publications Office, and the Publicity Office. The Chief Public Relations Officer, who is in charge of the department, has under him three Officers responsible for the offices, and a staff of about 180 persons.

* * * *

**The Chief P.R.O.—Now We Know**

There has often been dispute as to the exact powers and standing of the P.R.O. in his relation to other Officers. Mr. Brebner explained in some detail the organisation and staffing arrangements of the Chief Public Relations Officer for the London Transport Executive. In his contacts with the public, which are effected through the Public Relations Office, the Chief Public Relations Officer has a good deal of scope, for the number of letters received by the department from the public has risen from about 750 a week before the war to a present average of over 1,500, and has been as high as 2,000. All letters containing complaints or suggestions are referred to the appropriate officers of London Transport. The Chief Public Relations Officer has the final say, save that only of the Chairman of the Executive, in the reply made to any communication. If a letter is passed out to another department and returned with information which is either incomplete or unsatisfactory in some way, the Chief Public Relations Officer returns it to the department concerned for further inquiry. Not until he is certain that the answer is satisfactory is the letter sent.

* * * *

**Looking Forward in East Africa**

We give elsewhere in this issue an abstract of a valuable paper given by Sir Reginald Robins, East African High Commissioner, in which he recounts the inception and early history of the systems which were merged last year as the East African Railways and goes on to discuss their present organisation and future plans. The structure of the East African Railways derives from the initiative of Mr. (later Sir) Christian Felling, who came from the South African Railways in 1922 to manage the old Uganda Railway and boldly advocated its separation from government administration and methods and its treatment as a public utility, run on commercial lines and removed from local politics. His advocacy finally triumphed, and before his death the Kenya & Uganda Railways, as the Uganda Railway had become, was a sound undertaking which was strong enough to ride the storm of the 1930-31 depression and meet a second great challenge less than a decade later, the second world war when East Africa leaped into the strategic limelight. Now, recovering from the burden of war, the newly-formed system enters on a period of great development and extension, the main details of which we have recorded in previous issues. Fortunately the foresight shown in the past twenty years has laid a firm foundation on which to build the new transport edifice of East Africa.

* * * *

**A Revolutionary Steam Locomotive**

Through the kindness of the management of the Norfolk & Western Railway, U.S.A., we are able to publish elsewhere in this issue, an account of a most remarkable locomotive, which emerged from that company's works at Roanoke, Virginia, in July, 1947. This locomotive, the appearance of which was announced with a modesty out of all proportion to its startling

departures from conventional practice, incorporates extensive and much-needed reforms that have been achieved at the cost of far-reaching modifications to the ordinary layout. Complete control of combustion at all times, is put into the hands of the fireman, who, nevertheless, normally will make use of the very ingenious automatic control arrangements. The Stephensonian draught-producing apparatus, using cylinder exhaust, is discarded in favour of an induced-draught fan; additional automatic controls govern the fuel/air ratio and relate the mechanical stoker performance to the steam demands on the boiler. The smoke nuisance is much reduced by these devices. A thermo-hydraulic feed-water regulator controls the Worthington feed pump, so that a desired water level can be maintained in the boiler, even when the locomotive is left unattended. The courage and enterprise of this bold venture are most praiseworthy, and news of the locomotive's behaviour in service will be a matter of the greatest interest and importance to locomotive engineers.

* * * *

## Lord Portal

LORD PORTAL'S sudden death last Friday, at what is now regarded as the youthful age of 64, removes a very public spirited man from our public life. To the man-in-the-street Portal suggests paper for bank notes, and pre-fabricated houses. It is significant that in its obituary notice *The Times*, in referring at some length to his work for the relief and recovery of the industrial areas in South Wales, as Chairman of the Coal Production Council, as Minister of Works, and his other activities did not think it worth while even to mention that he was also the 17th and last Chairman of the Great Western Railway Company. He was elected a Director in 1927 and resigned in 1940 on being appointed a Parliamentary Secretary to the Ministry of Supply. He rejoined the Great Western Board in 1944 and succeeded Sir Charles Hambro as Chairman. The Portal family has a long association with British railways. For many years there was a Portal on the Board of the London & South Western Railway, Sir Wyndham Portal, grandfather of the late peer, being Chairman from 1892 to 1899. In fact, it was a matter of some surprise when a Portal joined the Great Western Board rather than the Southern. There was surprise, too, when Sir Robert Horne, as he then was, succeeded Lord Churchill as Chairman of the G.W.R. However, Lord Portal's ambition was achieved ten years later. Thoroughly enjoying politics and being a public figure, he had some hope that in the new *régime* he might be appointed first Chairman of the British Transport Commission or at any rate a member thereof. Being a millionaire the salary attaching thereto would have been to him a mere bagatelle. Ambitions are often strange. There was some criticism, perhaps unfairly, that when taking part with the other railway Chairmen in opposing the Transport Bill he rather "trimmed his sails."

* * * *

## Transport and Traders

WHEN Sir Cyril Hurcomb, Chairman of the British Transport Commission, addressed the National Union of Manufacturers on May 4, he was able to give some encouraging details of improvement in the overall transport position. Sir Cyril Hurcomb's address, which was delivered at the annual luncheon of the union, is reported elsewhere in this issue. He said that the shortage of locomotives had been overcome, and the number of wagons under or awaiting repairs was now less than 9 per cent. of the book stock, the lowest figure for four years. No difficulty had been experienced last winter in moving the increased output of coal, or the higher production of steel. The railways were lifting from the steelworks over 200,000 tons a week, or over 10 per cent. more than a year ago, and recently had reached an all-time record with wagon carrying loads.

The locomotive and wagon position, no doubt, has been helped very considerably by the decline in traffic, so that the easier conditions prevailing are not an unmixed blessing to the Commission. Indeed, later on in his address, Sir Cyril Hurcomb made a strong bid for the support of the manufacturers, and was at pains to point to the attractions offered by the transport agencies under the control of the Commission.

He showed that increasing use is being made of complementary services on rail and road under zonal collection and delivery schemes. Rail provides the trunk service between railheads, and road services connect railheads with sub-railheads, besides covering the collection of traffic from consignors and delivery to consignees. A comprehensive scheme covering the whole country on these lines has been prepared, and 142 sections of it are in complete operation; another 80 are operating in part.

A further example of progress towards the position which obtained when the railways were operated by the former privately-owned companies can be noted in the fact that more braked and partly braked express freight trains are being reintroduced. They now number about 7,000 a month, enabling one-day service to be given between many centres. The weekly mileages of these trains are not far short of the pre-war figure. Sir Cyril Hurcomb did not give any encouragement to those who have urged a one-day freight service to all parts of the country for general merchandise. He said that must remain an ideal, and that many traffics neither needed nor justified that amount of expedition.

On financial matters he could add little to current knowledge. He pointed to the rise in costs, and hoped for better passenger traffic returns as a result of the facilities being offered by the Railway Executive. He made it clear that railway finance would continue to be the predominant factor in the financial results and prospects of the Commission. The profitability of any public transport system, he urged, and particularly its railway section, where fixed charges are necessarily high and operating costs cannot be easily or rapidly adjusted to fluctuations in traffic, had to depend on the volume of support attracted from trade and industry. On the volume of support which publicly-owned transport was accorded would depend the price at which it was available. On the charges schemes in general, he said that "at an early date" a document would be prepared explaining the principles of the general structure of the suggested charging scheme. It would cover such matters as classification; conditions of carriage; methods of calculating distances; small consignments; livestock. These matters would be discussed with important bodies representing trade and industry with a view to ironing out differences before the scheme was submitted formally to the Transport Tribunal.

* * * *

## Rapid Transit

IN our issue of September 10, 1948, we gave details of the report prepared by Mr. E. R. L. Fitzpayne, General Manager, Glasgow Corporation Transport, for the Glasgow Municipal Transport Committee. His proposals involve the development of a rapid transit system of electric railways in the city and suburbs, comprising (*a*) electrification of steam-operated railways; (*b*) the construction of new tunnels and surface lines for electric trains; (*c*) the provision of feeder road services which will not enter the centre of the city. The second group of works is in fact a rapid transit system, in tunnel under the centre of the city and with its own tracks in the central reservations of main arterial roads in the outlying districts.

Mr. Fitzpayne, at a recent meeting of the Scottish Section of the Institute of Transport, stressed the advantages of a rapid transit system. They include some which are shared by electric railways proper, such as interchange facilities, high running speeds, and frequent services. He pointed out that a rapid transit system is in many respects an electric tramway operating on its own right-of-way. It differs from a railway mainly in that the engineering works required, at least for sections not in tunnel, are lighter than those for a railway following approximately the same alignment, and in the lightness and shortness of the trains, which are not, it seems, to exceed two, or perhaps, at peak traffic periods, four single-deck cars. His proposals for stations, where there would be no open platforms, are revolutionary; the walls of the enclosed space rise directly from the edge of the platform nearest the track, access to the opposite platform and, in the open-air sections, to the far side of the highway being by subway; sliding doors on the track side of the platform give access to vehicles, which must presumably be stopped almost exactly in the right position, involving, it

would seem, a repeated strain on motormen. To the urban electric railway officer, whose eight-coach trains are filled to bursting during rush hours, Mr. Fitzpayne's light trains will seem either to be hopelessly inadequate for the traffic, or to postulate a traffic far too light to justify the engineering works involved.

Mr. Fitzpayne, however, is mainly concerned to put the case for the rail, as opposed to the road vehicle as a contribution to the solution of the traffic problem of a city where electric railways have not played a great part; notwithstanding the increasing traffic of the existing Corporation Underground, its restricted dimensions preclude its expansion, or linking with other systems except for interchange of passengers. He reviews existing and planned electric systems in some great cities, but does not draw a sufficient distinction between rapid transit and standard electric railway, and is in error in implying that the Moscow Metro is the sort of system which he advocates for Glasgow; he is on safer ground in citing the rapid transit systems of Stockholm and Oslo, but the populations of these cities imply, surely, far lighter traffics than may be expected in Glasgow.

* * * *

## British Transport Commission Traffic Receipts

ANOTHER serious decline in the gross revenue of the British Transport Commission is shown in the latest return of traffic receipts. This is for the four weeks to April 24, and it shows a decline of £890,000 at £29,173,000. For the four months of the present year to April 24, compared with the like period of 1948, the aggregate traffic receipts at £111,800,000 are now less by £3,626,000.

British Railways' receipts for the most recent four weeks have totalled £24,541,000, which is £878,000 less than for the similar period a year ago. The very heavy decline in passenger receipts has continued; at £9,068,000, they are £1,014,000 down. Merchandise and livestock receipts at £6,104,000 are also less by £206,000. In other traffic categories there have been small increases; thus, parcels by passenger train brought in £24,000 more at £2,186,000, and minerals £14,000 more at £2,195,000. Coal and coke receipts were again better and were up £304,000 at £4,988,000. The table hereunder gives details of the various traffics for the four weeks to April 24, and the aggregate for the sixteen weeks to that date compared with the similar periods of last year:—

| | Four weeks to April 24 | | Incr. or decr. | Aggregate to April 24 | | Incr. or decr. |
|---|---|---|---|---|---|---|
| | 1949 | 1948 | | 1949 | 1948 | |
| | £000 | £000 | £000 | £000 | £000 | £000 |
| *British Railways*— | | | | | | |
| Passengers ... ... | 9,068 | 10,082 | — 1,014 | 29,121 | 32,609 | — 3,488 |
| Parcels, etc., by passenger train ... ... | 2,186 | 2,162 | + 24 | 8,370 | 8,591 | — 221 |
| Merchandise & livestock | 6,104 | 6,310 | — 206 | 26,041 | 27,333 | — 1,292 |
| Minerals ... ... | 2,195 | 2,181 | + 14 | 9,375 | 8,797 | + 578 |
| Coal & coke ... ... | 4,988 | 4,684 | + 304 | 21,184 | 20,239 | + 945 |
| | 24,541 | 25,419 | — 878 | 94,091 | 97,569 | — 3,478 |
| *London Transport*— | | | | | | |
| Railways ... ... ... | 1,129 | 1,144 | — 15 | 4,474 | 4,518 | — 44 |
| Buses & coaches ... | 2,492 | 2,479 | + 13 | 9,308 | 9,386 | — 78 |
| Trams & trolleybuses ... | 871 | 890 | — 19 | 3,314 | 3,407 | — 93 |
| | 4,492 | 4,513 | — 21 | 17,096 | 17,311 | — 215 |
| *Inland Waterways*— | | | | | | |
| Tolls ... ... ... | 54 | 56 | — 2 | 234 | 225 | + 9 |
| Freight charges, etc. ... | 86 | 75 | + 11 | 379 | 321 | + 58 |
| | 140 | 131 | + 9 | 613 | 546 | + 67 |
| *Total* ... ... ... | 29,173 | 30,063 | — 890 | 111,800 | 115,426 | — 3,626 |

The aggregate receipts for the year of British Railways are now £3,478,000 down at £94,091,000. The only categories to show improvement are coal and coke, which at £21,184,000 has brought in £945,000 more, and mineral traffic which is £578,000 greater at £9,375,000. Passenger traffic is lower by £3,488,000 at £29,121,000, and parcels by passenger train at £8,370,000 is £221,000 down. Merchandise and livestock earnings are £1,292,000 less at £26,041,000.

## America Fears Nationalisation

IN our issue of April 15 an article entitled "An American View of Nationalisation" explained that the U.S.A. railways were subject to a great deal of adverse criticism in spite of the excellent operating results which they had achieved since the war. Some of the attacks have been accompanied by vague suggestions that the railways, being a public utility, should be taken over by the State. In consequence, there is a growing danger that the same kind of atmosphere may be created as preceded the nationalisation of British transport. This is the theme of an article which we reprint on page 517 from *The Argonaut*, of San Francisco.

In characteristic American phraseology we are told that the skids are already greased for United States transport to go down the same road as Britain has taken. This is an extreme view. A reaction may occur soon, for America is jealous of any interference with individual liberty, and President Truman may have a rebuff over the socialistic programme of National Health Insurance measures which he launched recently.

In the meantime, the Association of American Railroads is alive to the trend of events and should be capable of putting the railways' case before the public in a convincing fashion. Other influences should assist the railways to secure a fair hearing. The creation of the Regional Shippers' Advisory Boards after the first world war has kept traders and agriculturists in touch with questions of wagon supply and traffic regulation. The National Industrial Traffic League is another active organisation which appreciates the advantage of allowing the railways to earn a reasonable return on their capital so that they can bring their facilities up to date. The American Society of Traffic & Transportation, founded last year, may help to steady opinion among the younger generation. The Society aims at establishing high standards of knowledge, technical training, and business principles for all who are engaged in transport. Its activities will supplement the work of the American universities which give transport economics a prominent place in their courses of study. Taking all these factors into account, we think that the proponents of nationalisation will have to contend with far stronger opposition in America than our Labour Government had to face.

* * * *

## South African Railways & Harbours

THE satisfactory state of industry and trade in the Union in 1947 was reflected in the high level of freight traffic hauled by the South African Railways, as shown in the report for the financial year ended March 31, 1948, a copy of which has been sent to us by the General Manager, Mr. W. Marshall Clark. At the end of the year the capital expenditure on the railways and all subsidiary services amounted to £246,186,151, representing an increase of £158,922,785 since the date of Union. The Administration pays interest on all moneys advanced by the Treasury for capital works, and as the loans are not redeemed, interest has to be paid in perpetuity. The total amount of interest-bearing capital as at March 31, 1948, was £221,287,268, and the interest on this sum, which is met from revenue, exceeds £7,000,000 a year.

A new record was created during this year when the total number of passengers carried by rail exceeded the record set up in 1946-47 by over 2,800,000. The increase was due to the larger number (3,326,940) of suburban third-class journeys undertaken, more particularly in the densely-populated areas. Long-distance journeys decreased by some 470,000 and passenger earnings as a whole declined by about £300,000 in comparison with the preceding year. Of the 243,694,986 passenger journeys undertaken, no less than 214,288,972 were suburban.

A substantial increase was registered in train-mileages under all heads, with the exception of mixed trains. The increase in respect of goods trains was to be expected, having regard to the increased tonnages conveyed, but the fact that passenger mileage was also well in excess of the figures for the previous year indicates the extent to which additional provision for passengers was made, especially on main-line services. During the year the total train and engine-mileage run exceeded 100,000,000 for the first time on record. The total train-mileage was 78,019,010.

The appropriation from net revenue of £850,000 for the year 1947-48 was a contribution to the betterment fund, representing an increase of £350,000 over the appropriation for the previous year. The tonnage of revenue-earning traffic conveyed increased by 4·57 per cent., and the relative freight ton-mileage by 3·85 per cent. In comparison with 1946-47, the average length of haul of revenue-earning traffic decreased from 238 to 236 miles. The average net load of goods trains increased from 238 tons to 242 tons. The gross total of goods traffic conveyed was 52,614,456 tons, and the ton-mileage was 13,176,365,155. Both these figures constitute a considerable increase over those for the previous financial year. The revenue derived from goods traffic was £40,247,925, or £4,681,146 more than the total for 1946-47. The volume of agricultural products carried amounted to 9,032,503 tons, and coal to 15,000,522 tons. Minerals, ores, etc. (other than coal) accounted for 6,882,491 tons, and general merchandise 4,892,396 tons.

The net result of working the railways and subsidiary services for the year was a deficit of £609,420 as compared with a surplus of £140,716 for the previous financial year. The total revenue from all services was £82,637,495 and the expenditure £82,396,915, and net revenue appropriations amounted to £850,000. Some of the principal operating figures are tabulated below:—

| | 1946-47 | 1947-48 |
|---|---|---|
| Route-miles open | 13,331 | 13,331 |
| Train-miles | 75,727,282 | 78,019,010 |
| Passenger journeys | 240,841,062 | 243,694,986 |
| Goods and minerals (tons) | 27,266,695 | 29,330,686 |
| Coal traffic (tons) | 15,095,140 | 15,000,522 |
| Ton-miles (revenue-earning) | 10,249,943,758 | 10,645,024,773 |
| Average haul (miles) | 238 | 236 |
| Operating ratio (per cent.) | 76·06 | 77·17 |
| Percentage return on capital | £2 14s. 7d. | £2 0s. 11d. |
| | £ | £ |
| Passenger receipts | 13,682,885 | 13,376,103 |
| Goods and mineral receipts | 35,566,779 | 40,247,925 |
| Coal traffic receipts | 6,427,453 | 6,853,047 |
| Total earnings | 60,810,161 | 66,490,581 |
| Ordinary working expenditure | 44,246,628 | 47,139,708 |
| Depreciation | 2,005,512 | 4,169,960 |
| Surplus over working expenditure | 14,558,021 | 15,180,913 |
| Surplus over interest, etc. | dr. 640,512 | dr. 1,628,434 |
| Capital expenditure, open lines | 199,219,335 | 212,084,704 |

The expenditure during the year on the provision of additional facilities on open lines and the improvement or extension of existing facilities amounted to £12,627,927. Regarding electrification, the General Manager says that financial provision made in the estimates of expenditure on capital and betterment works for 1947-48 in respect of electrification projects amounted to £6,273,950. Electrified sections total 586½ route-miles, with 558 under construction.

At the end of the year there were 206 electric locomotives in service, and 62 on order or authorised, and four diesel-electric locomotives. There were 216 motor coaches in service and 244 were on order or authorised. The number of 3 ft. 6 in. gauge steam locomotives in use at the end of March, 1948, was 2,368, and there were 59 narrow-gauge steam locomotives. Because of the difficult supply position there were in service a large number of locomotives due for scrapping. During the year 105 new locomotives were placed in service, leaving 224 still to be delivered on orders placed up to March 31, 1948. Sixteen of the 28 new class 3-E electric locomotives on order were also placed in service. Of thirty-one new coaches brought into service, three were imported air-conditioned coaches, and 28 electric non-motor trailers built in the Administration's workshops. Orders for a large number of new coaches from overseas are still outstanding.

The output of new rolling stock in the Union continues to be hampered by the shortage of materials. Of 2,714 new goods vehicles placed in traffic during 1947-48, 1,180 were built in the Administration's workshops and 1,405 constructed by a South African engineering firm; 129 narrow-gauge bogie wagons were purchased from surplus stocks in the U.S.A.

The total route-mileage operated by the departmental road motor services in the Union and South-West Africa increased to a total of 23,583 miles, and the revenue earned for 1947-48 was £2,190,507. A loss on the working of these services of £553,049 was recorded, which was £28,610 less than in the previous financial year.

Road motor tours were resumed. The arrival of Canadian-built buses enabled a great improvement to be made in the standard of comfort and the service of interurban bus routes. A weekly luxury bus service between Cape Town and Durban was instituted.

The new Railway Training College at Esselen Park was taken partially into use, and in all, 2,207 European staff attended this college and the temporary college at Kroonstad during 1947-48.

Many important realignment and deviation works are in hand, particularly in the Hex River area. A significant event was the opening of the Whites-Odendaalsrus line to serve the new gold-mining district in the Orange Free State. The opening of the Umkomaas River Bridge on the Natal South Coast line in July, 1948, was a further stage in the improvements programme for the Durban-Umkomaas section, over which more powerful engines may now work.

The "Round-in-Nine" and "Round-in-Fifteen" tour trains were reintroduced in the winter of 1947 and early in 1948 respectively. These "holidays-on-wheels" are increasingly popular because of the provision of excellent accommodation in the trains, the interest of the itineraries, and the reasonable prices charged.

## U.S.A. Transportation Threatened with Government Ownership

*(From "The Argonaut," San Francisco)*

THE pressure of political and economic conditions are forcing the transportation industry steadily down the road to Government ownership. Unless present trends are arrested, the day will surely come when not only the railroads, but the trucks and buses, the water carriers, the airlines, and even the pipe lines, will no longer be able to maintain themselves as part of our free enterprise system.

The pressure is largely the product of the evolution of competing forms of commercial transportation—the railroad, the motor carrier, the airline, and the inland water carrier—and the national policies governing their development and expansion. It is also the product of general indifference and unconcern on the part of the businessmen of this country—the users of transportation—as to what is happening. Conditions in transportation have undergone a revolution, but the habits of thought of most people about this industry have not changed in a similar manner.

The hodge-podge of enactments, characterising the development of our national transportation policy from 1887 on down, the result of attempts to compromise the conflicts between various competing and opposing carriers as they have been brought under federal jurisdiction, leaves us now with too much regulation, too much conflict in regulation, and a system better adapted to conditions 30 years ago than today. The function of Government in transportation now extends far beyond public need, and too little is left to management.

Drastic regulation of competing services is not the solution of the transportation problem. Regulation is expensive. It is bureaucratic. Once established, it expands, and it paralyses private initiative without offering constructive leadership. The Government cannot, for the sake of any one agency of transportation, invent and apply to its competitors either regulation or burden on the theory on which horses are handicapped in a race.

Common carriers are subject to the same play of economic forces as all other business enterprises. Regulation cannot control economic law. Regulation can fix rates, but it cannot control production and consumption. Regulation can fix pay and working rules, but it cannot guarantee employment.

There are really no insurmountable obstacles in the path of a sound and lasting solution to our national transportation problem, if we bear in mind that what we are dealing with is transportation as a service to the public. But, the element of time is of prime importance. Whatever is to be done about the problem of legislativewise should be enacted into law within the next two years, and should be well established in operation, if possible, before we reach the depths of the next business depression. Otherwise, there is little hope for a continuance of private operation of transportation in this country. The skids are already greased for us to go down the same road as Britain. There is still time, however, to give careful consideration to all phases of the problem, and for the proper legislative action.

# LETTERS TO THE EDITOR

*(The Editor is not responsible for the opinions of correspondents)*

## Railway Safety

May 1

TO THE EDITOR OF THE RAILWAY GAZETTE

SIR,—Progress with or without safety! To what extent in this era of speed can we go in any means of transport without check and double check on the human element failing? And yet this is what happens on British Railways. While so much lip service is published regarding safety standards which they are credited with—and rightly so—giving the public that sense of security that is world renowned, it is interesting to note a step that is being taken by British Railways, which in itself is not helpful in assisting the human element to avoid accidents.

These are the simple facts; on the old Great Western system a practice has always existed whereby the warning, or distant, signal would be kept at an "on" or caution position during speed reductions necessitated by repair work to the track, or other reasons why a higher speed must not be maintained. This warning signal at "caution" is of great assistance to the driver in locating the area of the reduction, especially in dark or foggy weather, and is a further check to the restriction warning indicators, exhibited half-a-mile from the commencement (of reduction).

Other Regions of British Railways have not taken this precaution, and no doubt the Ministry of Transport could give information regarding accidents caused in recent years through running too fast over tracks under repair during bad visibility, especially at night, which this extra precaution (of the late Great Western Railway) which is now being sacrificed, might have avoided.

The abolition of this practice on the Western Region is being carried out to bring uniformity on all our railways, and it is supposedly easier to adopt that of the larger railway network. Therefore, the Railway Executive can close its eyes to the fact that the old Great Western system was the safest method; but it must also bear in mind that it is wrong to take one backward step from safety, although it may promise the public safer methods in the distant future. The British public will appreciate that security, even at the expense of a few minutes' delay, far more than all the multi-coloured vehicles and engines passing before their eyes.

Yours faithfully,

GELEISE

## Increasing Goods Train Loads

12, Jones Street,
Rynfield, Benoni,
Transvaal, S. Africa. April 26

TO THE EDITOR OF THE RAILWAY GAZETTE

SIR,—Recent years have seen the establishment of the Rugby Testing Station and the L.M.S.R. mobile testing plant, both of which presumably have as one of their ultimate objects reduction in locomotive fuel consumption through improved design. May one urge that equal attention should be paid to reduction in consumption through improved utilisation? I refer particularly to increasing the average load of goods trains, and I believe there is scope in this direction for making overall savings quite as great as those obtained through superheating or long valve travel.

It is to be expected that, if an engine can move a given quantity of goods in one journey instead of two, the total coal burnt will be less, for the fuel consumed in propelling the engine itself (and this may be a third of that required for the train), as also the fuel consumed in lighting up, standby, and light running, will be halved. Trials and general experience prove that within broad limits the greater the load hauled, the less is the consumption per ton-mile (and this is the true measure of fuel consumption). Yet, according to statistics published by the L.N.E.R. in 1946, the average gross load of goods trains in England is only 325 tons! On Indian broad-gauge railways the average load is three times this.

Conditions in England and India are dissimilar, and I do not suggest that average loads of 950 or more tons could be achieved in England. But an increase by only 100 tons would save hundreds of thousands of tons of coal in a year, and is this increase unattainable? Indian engines are little more powerful than their British counterparts, and the gradients they operate over are often severe. The following are, I think, the means to high average load:—

(*i*) Set load limits at what the engine can haul on the steepest gradient at 60 per cent. cut-off (*e.g.*, 1,100 tons for an engine of 35,000 lb. tractive effort on a 1 in 100 grade, or 1,700 tons on 1 in 150).

(*ii*) Do not run goods trains to fixed schedules, but have paths planned which can be operated whenever full loads have accumulated.

(*iii*) Account goods train coal consumption on the ton-mile basis. Accounting only "per mile" is thoroughly misleading, as a decrease in consumption on this basis can be—and frequently is—merely the result of reduced average load and, in fact, of diseconomy.

Running officers, armed with periodical statistics of fuel consumption per ton-mile and the corresponding average load during the period, are urgently needed for the pressure they exert on the traffic department to avoid under-load running.

May I, while urging these measures, attempt to forestall some of the counter-arguments that may be raised:—

(*i*) Great improvement in average train load can be obtained without calling for any increase in average wagon load.

(*ii*) Heavy loading need not slow train speed seriously. Indian engines of 35,000 lb. tractive effort regularly haul trains of 1,100 tons on a road climbing 600 feet in 81 miles at an average speed of 18 m.p.h.

(*iii*) Heavy loading need not slow down traffic movement. On the road just mentioned, up to five trains of 1,100 tons are run daily in the up-direction, besides passenger trains and down goods trains. The line is a single line.

Can it be contended that traffic would be moved more expeditiously in 17 trains of 325 tons each?

In conclusion, may I make a concrete suggestion that the Railway Executive choose a small district, or part of a district, for experiment and depute an officer specially, who would be charged with the sole duty of raising the average load of goods trains by, say, 150 tons, by all and every means, orthodox or otherwise? Such an experiment would cost little, and the benefit obtained might be great indeed.

Yours faithfully,

J. F. S. MACDONALD,
formerly Senior Locomotive Running Officer, Nizam's State Railway, India

## Bus Route Numbers

The Omnibus Society, 45, Crest Road,
Hayes, Bromley, Kent. April 29

TO THE EDITOR OF THE RAILWAY GAZETTE

SIR,—Your correspondent, Mr. Douglas D. Castell, in your April 29 issue, has surely taken a fallacious view of the perils of service numbers appearing on the offside of buses and trolleybuses. For every rash person who might be tempted to run across the road to catch a bus exhibiting a particular service number, there must be a score who on seeing the service number will know that the bus is not the one they are seeking, and will, therefore, be able calmly to cross the road at the nearest pedestrian crossing.

Yours faithfully,

CHARLES F. KLAPPER,
Vice-President

## "Railway Companies Vindicated"

43, Rufford Road,
Edwinstowe, Notts. May 1

TO THE EDITOR OF THE RAILWAY GAZETTE

SIR,—I wish to comment on part of the letter by Lord Inman published on April 15, 1949, in *The Railway Gazette*; also on possible explanations of the present indifference of meals and attitude of attendants in London Midland Region dining cars, as in a letter by Mr. R. E. Charlewood in your issue dated April 29, 1949.

I realise it is impossible for Lord Inman to be fully informed on all departments under his control in a recently attained post, but it is obvious, in spite of the years that some have held office, that his top-rank assistants are equally in the dark as far as dining car operations are concerned. To state that "these trolleys are an innovation. Even if they should prove to be impracticable, they show that we are not afraid of experimenting, etc.," is an admission by the Hotels Executive of its flimsy knowledge of these matters; it prefers to waste money on this, whilst the more immediate problems are left untouched.

A lot could be done to eliminate the present widely-held opinion that "the least obliging staff," etc., is to be found on the Midland Division of London Midland Region, as Mr. R. E. Charlewood states in his letter.

First, on the Midland Division, they have the oldest and most out-of-date dining cars. The cars, Nos. 97, 98, 99, are a disgrace to the railways and catering industry, to say the least, and I am certain it amazes all when they read that, today, in cars type Nos. 230 and upwards to 239, a kettle must be boiled to make tea for a passenger.

What confusion there is in the kitchen, say, when serving breakfast, with the attendant endeavouring to make umpteen

pots of tea, while the cook attempts to dish out the meal in such confined space, and happens to have two grills, each taking three slices of bread for any number of breakfasts!

There is food which has to be disposed of, through lack of a refrigerator. True, there is an ice-box, but filled with foodstuffs; there is possibly room for 50 lb. of ice, which melts in a few hours in hot summer weather—a sound reason for the sometimes meagre portions until fresh supplies are obtainable.

There is the conductor who attempts to feed more than the supplies will liberally allow.

The later type of dining car should be made into a "dual-purpose car," as its present state is useless for any number of meals to be served. By "dual purpose" I mean that with a little alteration it could also become a buffet car, say on Saturdays and Sundays on some runs.

The attendant in Midland Region dining cars, unlike some other Regional cars, has to dash from customer to pantry to wash utensils from the car so that they are ready for the next sitting. Because of the time limit, this must be carried out during the current sitting so that the utensils are ready to be put on the table for the following sitting.

The attendant is often caused great embarrassment when a former customer refuses to vacate his seat in the car for some intending customer. This is sometimes brought about by allowing non-diners to sit in the restaurant car—not, I must add, by any of the train staff, but by order of the Control Office, Euston. I am referring to passengers entraining at Bedford.

Intimation of this is printed on the tickets given to intending diners, but few, if any, read them, as is quite obvious when they are questioned by attendants or ticket collectors. I say, put this information in the compartments where it would be read.

Lastly, why so many dining car inspectors? They are redundant. Surely the travelling public, and this page, do their job equally well.

Yours faithfully,
W. FULLALOVE

## Rates of Pay of Railway Staff

May 2

TO THE EDITOR OF THE RAILWAY GAZETTE

SIR,—Recently the demand made by the National Union of Railwaymen for a flat-rate increase of 12s. 6d. per week for the wages staff of the British Railways was turned down by the Railway Executive, and after a meeting with the Minister of Labour the claim has been revised to 10s. per week, with extra pay for work performed between noon and midnight Saturdays. According to the newspapers, this revised claim was lodged on Saturday, April 30.

On and from Monday, June 30, 1947, most of the staff on the railways received an increase of 7s. 6d. per week and a reduction in hours, in the case of supervisory and wages staffs, from 48 to 44 per week. This was in settlement of a demand for £1 per week advance and a reduction in hours to 40 per week.

On the operating side, work on the railways is continuous night and day throughout the week, and obviously it would not be possible for men in operating grades to work five long turns of eight hours and one short turn of four hours per week; so it was agreed to make it 88 hours per fortnight, which allows a full day off in that period.

Theoretically, this sounds simple, but in practice many snags were found. The first was the need for more staff; one man extra was required for every eleven men employed to cover the rest days of the eleven men. This, at a time when there was a manpower shortage in the country, made the immediate implementation of the award impossible, and in fact in many places it still is not being carried out, and the men are paid at overtime rates for the period they work on what should be their "rest" day.

A much worse feature, though, is the fact that most supervisors and senior operating staff on the whole of the railway system of the country under this award became entitled to one day off each fortnight. Their turns of duty on "rest" days are generally covered by junior men who are stepped up, and whose duties are covered in turn by their juniors, and so on. Thus, with some of the most experienced operating men away on "rest" day each weekday over the whole railway system and their places being taken by less experienced members of the staff, the loss in efficiency becomes immeasurable.

In view of the present demand for increased wages, I suggest this is an opportune time to remedy the serious error of judgment that was made in conceding the 44-hr. week to operating staff, by conceding the present claim for 10s. per week, providing it was agreed to revert to a 48-hr. week.

Most, if not all, of the additional cost of this would be offset by the saving in the reduced number of staff required and in reduced overtime payments, and the increase in efficiency would be incalculable.

Some trade union representatives would probably regard this as a retrograde step, but the vast majority of their members do not like the 44-hr. week, particularly when it is put into operation—for example, the man being booked off on his "rest" day instead of being allowed to work and get paid at overtime rate.

The principle of 44-hr. or 40-hr. weeks can be conveniently applied no doubt to most other departments' staffs without loss of efficiency, but never to the operating department, and this feature should be recognised by all concerned and extra emoluments paid in compensation accordingly.

Yours faithfully,
SUPERVISOR

## Handling Brighton Holiday Traffic

British Railways, Southern Region,
Waterloo Station,
London, S.E.1. May 10

TO THE EDITOR OF THE RAILWAY GAZETTE

SIR,—It was with some measure of gratification that I read Mr. F. S. Bond's letter on page 491 of the issue of *The Railway Gazette* dated May 6, and with regard to the concluding paragraph of the letter I would like to give the following information.

The maximum volume of traffic in any one hour on the up line from Keymer Junction to Balcombe Tunnel Box was from 7.30 p.m. to 8.30 p.m., when 21 trains of varying descriptions were run as under:—

13 trains non-stop
6 trains calling at Haywards Heath
1 train calling at Haywards Heath and Three Bridges
1 train serving all stations to Three Bridges

The headway at Keymer Junction was 2·8 min., and at Balcombe Tunnel Junction 3·0 mins.; the increased headway at Balcombe Tunnel was due to the running of the one stopping train which called at Balcombe Station.

Yours faithfully,
S. W. SMART
Superintendent of Operation

## Frog Tampers

6, Regent Street,
Coventry, Warwicks. May 2

TO THE EDITOR OF THE RAILWAY GAZETTE

SIR,—In the April 29 issue of your journal is an illustration of a frog tamper, which it is noted has been purchased by the Railway Executive, with the object of using it experimentally for the purpose of consolidating ballast when relaying permanent way, to reduce the usual enforced period of speed restriction imposed immediately after relaying.

It would be interesting to know if this machine has been brought to the notice of the Railway Executive through the medium of a salesman of some enterprising British firm manufacturing it, or through Report No. 1167 issued by the British Intelligence Objectives Sub-Committee on "German Railway Maintenance Methods, Covering Permanent Way, Bridges & Structures, and Signals & Telecommunications." Under the section "Bridges & Structures" of this report, which was prepared in part by the writer as joint investigator, is an illustration in Fig. 67 showing a similar German machine which has been in use for a number of years on German railways.

The German machine, weighing 750 kg., is somewhat heavier than the British type, and was found being used in Neumünster in May, 1946, for consolidating the sand formation before relaying the permanent way which had been destroyed by bombing. The makers of the tamper were given as Telemag, Esslingen.

It may be that this technical report referred to has been forgotten by the Railway Executive engineering advisors, although the report was sponsored by the main-line railways in 1946. If so, its revival may be worthy of consideration, as there may be other items of interest and helpfulness. One other interesting tool is the hydraulic jack illustrated in Fig. 10 of the above mentioned report: this jack was developed by the Germans during the war, and has advantages over the type in common use in this country. It would be of great assistance to bridging and breakdown gangs in speeding up their work, which frequently has to be carried out during long periods of speed restrictions.

Yours faithfully,
W. I. WILKS

# The Scrap Heap

WORLD'S SLOWEST TRAIN?

British Railways can take heart, for they have still to beat the Argentine's all-time slow record of 108 miles in 14½ hours. This was the service scheduled in 1940 on the Southern Railway of Argentina between Entre Rios (200 miles north of Buenos Aires) and Mburucuya.—*C. B. Wilson in a letter to the "Sunday Express."*

* * *

MISTAKEN IDENTITY

Not only the railways are haunted by characters whose strange names are shouted loudly and daily. "I have long been puzzled by Aubrey Tite," writes Mr. Gordon Rattray Taylor, from Richmond, Surrey. "He is, I always imagine, an old member of the Transport & General Workers' Union, to whom some injustice was once done, for bus conductors hopefully call out his name whenever new passengers have boarded their bus."—*John Bouverie in the "News Chronicle."*

* * *

1,000 RAILWAY BILKERS A YEAR IN CITY COURTS

A thousand people a year are accused in the City courts alone of bilking the railways, Alderman Denys Lowson said at the Mansion House recently. "This is becoming a very serious nuisance," he said.

For the second time within six months a defendant was found guilty of avoiding payment of his fare from Hammersmith. He was fined £3 and 21s. costs.—*From the "Evening Standard."*

* * *

**Wake Up! L.T.E.**

135, Mulgrave Road,
Cheam, Surrey. May 5

TO THE EDITOR OF THE RAILWAY GAZETTE

SIR,—The enclosed photograph of the entrance to South Kensington Station, taken a few weeks ago, may be of interest. I was prompted to take it when I noticed that the "District Railway" sign, which adorns the station entrance, had just been re-painted. Indeed, one could scarcely fail to see it, new paint or old, as the letters are some 2 ft. 6 in. high! In these days of nationalisation and unification it is refreshing to find at least one of the old companies has not entirely lost its identity.

Yours faithfully,
DERRICK J. W. BROUGH

SPARKS AS BIG AS FOOTBALLS

North British Locomotive Co. Ltd.,
Glasgow, N. March 28

TO THE EDITOR OF THE RAILWAY GAZETTE

SIR,—On March 17 and 18 I was cited as a technical witness in the case of a crofter *v.* the L.M.S.R., my duty being to appear for the railway company. Evidence was given by one of the witnesses in respect of engine No. 17694, which is an 0-6-0 freight engine of the "Barney" class, built by Dübs & Company (a constituent firm of the North British Locomotive Company) in 1900. I am enclosing a photostat of a press cutting from the *Glasgow Bulletin* of March 18 [reproduced in part below] which reports the account of the witness almost in verbatim, and suggest that even with the high pressure sales talk which we are accustomed to hear from America, our cousins across the water have nothing to compare with such an old locomotive as the one in question.

Yours truly,
C. W. HANCOCK

". . . a croft hand from Tobermory, near Muir of Ord, Ross-shire, said in the Court of Session, Edinburgh, yesterday that he had often seen balls of fire the size of footballs coming from the funnel of a train.

". . . [He] was giving evidence in an action for £1,000 brought against the L.M.S. by his employer, . . . who said sparks or cinders from an engine caused a fire which destroyed his croft, nine hay-stacks, and implements on September 15, 1945. The company denied liability.

"In cross-examination by counsel for the railway company, he said he saw the engine coming. It was going very fast.

"Counsel—Would it be going about 50 miles an hour?—Yes.

"Perhaps 100 miles an hour?—Yes. A hundred miles an hour.

"How would you describe what you saw; was it like a flaming torch?—Yes, like a flaming torch.

"Were there cinders coming out the size of cricket balls?—Yes.

"Was the engine emitting balls of flame, some the size of footballs?—Yes, they were the size of footballs.

"Are you not making all this up?—No. I have often seen balls of fire the size of footballs coming from the funnel of a train.

". . . [A] lecturer in engineering at the Heriot-Watt College said the engine had no spark arrester. It was built in 1900 for the old Highland Railway."

*A view of London Transport's South Kensington Station still showing the "District Railway" sign that has just been repainted*

*Photo] [D. J. W. Brough*

## 100 YEARS AGO

*From* THE RAILWAY TIMES, *May* 12, 1849

THE presentation of a petition from Mr. C. SAUNDERS, the secretary of the Great Western Railway Company, on Friday week, afforded Lord BROUGHAM the opportunity of stating that he understood from "several noble Lords that Mr. SAUNDERS was a most respectable person." His Lordship was not left unsupported in this act of justice to a gentleman upon whom, in his outburst of indignation at railway enormities, he had heaped charges which must have led any ordinary mind to a very opposite estimate of Mr. SAUNDERS's character.

"A little reflection would have enabled his Lordship to perceive that an open act, like that which formed the groundwork of his charge against Mr. SAUNDERS, could be by no ingenuity identified with insidious practices, over which the veil of obscurity was carefully drawn. If the South Devon Company feel that they can compel recusants to pay up, they have tribunals to which they may appeal. The explanation of Lord LYNDHURST sets the matter strongly in this light. "Mr. SAUNDERS," said his Lordship, "had refused to pay any more calls on them (the preference shares) until the point as to their validity should be settled—and *proceedings were now pending to decide the point.*" A further explanation was given by Lord BROUGHAM to the effect that the solicitor alluded to by by his Lordship on the previous occasion was not Mr. HUNT. The necessity for such *amendes* is painful to contemplate in persons of so elevated and authoritative a position as that attained by Lord BROUGHAM.

* * *

FAREWELL PARTY FOR LONDON TRANSPORT EMPLOYEES

Forty-seven members of the staff of the Works & Building Department of London Transport recently were entertained at a farewell tea party on the occasion of their simultaneous retirement. Many of these men, though reaching retiring age during the war, volunteered to stay on because of the shortage of staff. Their combined ages now total 3,141 years and their service over 1,300 years. During their service they have trained many younger employees of the department to carry on their traditions of fine craftsmanship.

* * *

WHAT'S IN A NAME?

If things are really what they seem
How does it come about
That railway firemen stoke their fires,
While others put fires out?

Can anybody tell me, please,
Why platelayers should "fettle,"
Or why the stone they deftly use
Should be described as "metal"?

And, whilst we're talking about track,
It puzzles me a bit
Why chairs on sleepers should recline
And not the opposite.

And many other names, I find,
Require a second look—
A booking-clerk won't take your bets
Or change your library book.

Another query never fails
To cause a puzzled frown—
Why *do* our "lifts" spend half their time
Conveying people *down*?

And, though I search the railways through,
No reason can I find
Why a "loco" is a lady
With a tender . . . H'm . . . behind!

A. B.

# OVERSEAS RAILWAY AFFAIRS

*(From our correspondents)*

## SOUTH AFRICA

### Welded Rails

Experiments to weld rails into 960 ft. lengths are being carried out at the welding depots of the railways. Many miles of track have been laid with 120 ft. rails, and it is now being investigated whether an even greater length of rail can be used economically, and whether travel comfort will be increased. Extra-long rails have been laid as part of the present tests.

### Johannesburg New Station

The permanent Harrison Street bridge, which forms part of the new Johannesburg station plan, has now reached a stage where construction work has had to be suspended until the existing subway for the city's motor traffic can be closed. The excavations and construction of new platforms on the old Wanderers site are being pushed ahead as much as possible, and it is hoped to transfer the railway lines from the existing to the lower level during the first half of next year.

Originally, it was hoped to complete this work, which may be called stage one of the station plan, towards the end of this year, but shortage of material and especially of cement, have made it impossible to work to the original schedule. Approximately six months before proceeding to stage one of the plan, the transfer of the railway platforms and track from the existing to the lower level, the Harrison Street subway for motor traffic will be closed and the traffic diverted from the subway to the existing temporary bridge running into Harrison Street on the northern side of the railway lines. This will be necessary to continue with the work on the permanent bridge. As soon as this part of the work is completed, the temporary bridge will be demolished.

The Wanderers Street bridge, on the eastern end of the "bottle-neck," is nearly completed. As soon as the existing platforms and tracks have been transferred to the lower level, a commencement will be made with stage two of the station plan, the excavation of the existing station area to the same level as the adjoining Wanderers site. This latter part of the station will cater for suburban traffic, and the northern section of the station, which is now being constructed on the old Wanderers site, will be reserved for main-line traffic. Three through lines will be provided for goods traffic. In both main-line and suburban sections, separate provision will be made for European and non-European passengers.

## EAST AFRICA

### Use of Tanganyika Coal

The Department of Lands & Mines announced recently that a mixed train on the Tanganyika Central line was hauled over the difficult Morogoro-Dodoma section by a locomotive burning coal from the new Mhukuru field in the Southern Province.

The coal sample was carried by road most of the way to Lindi, but a significant feature is that part of its journey was over a completed section of the railway being built inland from Mikindani to serve the groundnut area. It is the building of this railway which makes Mhukuru coal worth considering as a practical proposition.

The Tanganyika lines depend for the coal supplies at present mainly on South Africa. Imports from there during 1948 totalled 50,376 tons and from the United Kingdom 3,179 tons.

## RHODESIA

### Naming of Dining Cars

In February a twin dining car emerged from Bulawayo shops after painting and light repairs, bearing the name *Mosi-oa-Tunya* (the native name for the Victoria Falls and interpreted as "the smoke that thunders"). Five other dining cars are to be given native names—*Chimanimani, Zimbabwe, Vumba, Nchanga,* and *Munali.*

### Deviation at Bulawayo

As part of the scheme for the general expansion of railway facilities at Bulawayo, it has been decided to deviate the Cape main line between Bulawayo Station and Bellevue, about 3½ miles. Contracts have been let for the earthworks.

### Sale of Beira Railway

The sale of the Beira Railway to the Portuguese Government became effective as from midnight on April 6.

### Working Results

Receipts over the Rhodesian Railways system (including the Beira and Shabani lines) for the ten months ended January 31 totalled £8,441,025.

Expenses amounted to £6,270,402, leaving a net operating revenue of £2,170,623, an increase of £505,326 over the corresponding period of the previous year.

During January the following record figures were achieved; gross ton-miles 384,578,000; net ton-miles 178,374,000; train-miles 604,733; train engine-hours 35,606.

In February, locomotive user rose to 144·31 miles per day per engine in use and 134·92 miles per engine on line. There were only four locomotive failures, at an average of approximately 200,000 engine-miles per failure.

## CANADA

### C.N.R. Purchases

Fuel is the largest individual commodity among the 75,000 different items purchased each year by the Canadian National Railways, and its annual cost of $70,000,000 is second only to wages as the major item in the railways operating expenses. During the past ten years, the Canadian National Railways has had to pay out $233.92 a minute for materials and supplies, an average of $122,946,516 annually. The magnitude of these figures shows that the C.N.R. is the largest buyer in Canada. The railway buys as much as possible of its requirements in Canada and approximately 90 per cent. of the money spent remains in the country.

### Canadian National Summer Services

Additional passenger trains and faster schedules are featured in the Canadian National Railways Spring and Summer services. A new summer train, the "St. Lawrence Special," will provide weekend service between Montreal, Mont Joli, and Metis Beach during July and August. It will leave Montreal each Friday and return from Metis Beach and Mont Jolie each Sunday during that period. It also will operate from Montreal on June 30 and from Metis Beach on September 5.

Extra daily service from Toronto to Montreal will be provided from June 26 to September 15 by an additional "pool" train which will leave Toronto at 9.15 a.m.

**New Freight Warehouse at Montreal, C.N.R.**

*Outbound freight warehouse forming part of the new Bonaventure, Montreal, freight terminal of the Canadian National Railways* (*see our April 22 issue*)

It will have a running time of 7 hr. 15 min. and arrive in Central Station at 4.30 p.m. A diner and a compartment parlour car will be included. Faster schedules will be maintained between Montreal, New York, and Washington by the "Montrealer" and "Washingtonian," the running times of which have been cut by 45 and 55 min. respectively. Schedules on C.N.R. local trains will be adjusted to meet with the change to daylight saving time.

## BELGIUM

### Timetable Innovations

The new summer edition of the *Indicateur Officiel* of the National Railways contains a new feature. The timetables of the important main lines radiating from Brussels towards Verviers, Ostend, Courtrai, Tournai, Mons, Charleroi, and Arlon, as well as those of the "axial" line Liège-Namur-Charleroi, are shown in two parts.

The first part contains the times of the international and national express trains and gives, in the case of the "down" timetables, the departure times of "guaranteed" connections at all stations where the trains from Brussels call. In a similar way, the connections with all up expresses to Brussels are shown in the "up" timetables. The first part of the timetables also includes those express trains which are projected from the main line over the branch line concerned. Such trains are specially marked in print. The terminal stations of all express trains are underlined.

The second part of the main-line timetables gives the timings of semi-fast and local trains, calling at most or all intermediate stations. For these trains, the timings of connecting trains are not specially repeated, because of lack of space. However, for all lines which do not originate or end at an important regional centre, the connections to and from that centre have been included in the timetable. In presenting this innovation, the railways hope that the improvement will be appreciated by the travelling public, and the management welcomes suggestions for further improvements.

## U.S.S.R.

### Summer Timetable Improvements

Various improvements in passenger services have been embodied in the summer timetable which came in force on April 21. According to a recent statement additional trains have been introduced on the Moscow-Vladivostok (Trans-Siberian) line, and on the following main lines: Moscow-Batum; Moscow-Mineralnoye Vodi (the main watering place in the Caucasian mountains); Moscow-Chelyabinsk; Novosibirsk-Alma Ata (Turksib main line). For the first time since the end of the war through trains have been introduced between Moscow and Magnitogorsk (Ural Mountains) and Moscow and Karaganda, also between Leningrad and Odessa, and between Moscow and Kotlas (in northern Russia).

A number of supplementary trains has been instituted for workers taking their holidays in the health resorts of the Crimea and other places. A second daily fast train now runs between Moscow and Riga. Special holiday trains are to operate between Baku and Mineralnoye Vodi, and a large number of through cars has been introduced on cross-country routes.

Many trains have been accelerated. Special attention has been paid to the improvement of the suburban services of large towns. In Moscow the daily number of suburban trains has been increased by 35 on the total twelve months ago. Many of the larger stations on the main lines have been provided with bookstalls, sweet-shops, fruit kiosks, and so on, to enhance the amenities for the travelling public. Restaurants and rest rooms have been instituted at all important junction stations. The number of conductors has been considerably increased and the public may now obtain *en route* tickets for journeys involving change which previously could be obtained at transfer stations only, often with great loss of time and by missing train connections which may be immediately available.

## HUNGARY

### Locomotives and Rolling Stock for India

Within the framework of the trade agreement concluded between Hungary and India early in April the Hungarian locomotive and rolling stock industry is to supply to the Indian Railways a number of steam locomotives, diesel locomotives, and goods wagons.

## Publications Received

**O.T. Railway Magazine.** — The Oudh Tirhut State Railway operates on the left bank of the Ganges a network of metre-gauge lines which were taken over by the Indian State in 1943 from the former Bengal & North Western and the Rohilkund & Kumaon railways. It has now joined the band of railways which produce staff magazines, and we have received a copy of the first number, for April-May-June, 1949. Shri G. C. Trehan, General Manager, contributes an introductory message, and there follow several articles on general and railway topics, points from letters to the editor, and personalia.

**Ferrocarriles Españoles, Diagramas de los Profiles Longitudinales, II—Zona "M.Z.A." (Spanish Railways Gradient Profiles, II—M.Z.A. Zone).** By Mario Miquel. Barcelona. Published by the Author at Casanova 113.—This is a companion volume to the author's publication of the gradients of the former Northern Railway of Spain, and deals with the main lines and principal branches of the former Madrid, Saragossa & Alicante Railway. The information has been officially checked. All stations and halts, with important altitudes, are marked, and the gradient figures are shown, according to the customary Continental practice, in metres per km. (that is, a gradient marked 10 is one of 1 in 100). The horizontal scale is marked in 5-km. divisions. The greatest altitude on any of the routes included is at Los Palancares (1,132 metres), the summit of the new Cuenca—Utiel line which forms part of the direct Madrid—Valencia route. The Madrid—Barcelona line reaches its highest point at Torralba (1,108 metres), some 95 miles from Madrid, and the culmination of a gradual rise of 50 miles. Gradients as severe as 1 in 66 are by no means rare, though, having regard to the mountainous country, the original lines were well engineered and, often at the expense of directness, take full advantage of the few river valleys. The building of lengthy new "cut-off" lines is part of a great modernisation and reconstruction programme now initiated by the Spanish National Railways and including extensive electrification and resignalling. The railways of Spain are entering on a new period of development and this addition to their bibliography is therefore timely.

**Progress on the French National Railways.**—The French National Railways have brought out an illustrated booklet showing the rapid reconstruction which has been made since the end of 1944, when they were in a critical condition as a result of wartime devastation. At that time the 11,180 miles of lines open to traffic were composed of numerous sections isolated by broken bridges, but by May, 1946, nearly all the system of 24,800 miles was again open to traffic. The publication includes striking views of bridges and viaducts before and after reconstruction. The programme for the re-equipment and reorganisation of the S.N.C.F. is well summarised and the text is supplemented by useful maps and diagrams.

**Quiz on Railroads and Railroading.** Washington 6, U.S.A.: Association of American Railroads, Transportation Building. 7 in. × 10 in. Paper covers. Gratis.—The Association of American Railroads first issued this informative and well-illustrated booklet in 1940 in answer to the many questions frequently asked about railways. The booklet has proved so popular that several additional printings have been necessary. Some of the claims made on behalf of American railroads will surprise the British reader; for example, it is stated that the fastest train run ever recorded in the United States was on June 12, 1905, when the "Pennsylvania Special" of the Pennsylvania Railroad, "ran three miles in Ohio in 85 seconds, or at the rate of 127·06 m.p.h." It is also claimed that a speed of 112·5 m.p.h. (a mile in 32 seconds) was achieved by a New York Central locomotive on May 11, 1893.

**Oxygen: Its Potentialities in Iron and Steel Production.**—The British Oxygen Co. Ltd., London, summarises in a well-illustrated brochure the rôle of medium-purity oxygen in the manufacture of liquid steel. The application of oxygen in the open hearth and Bessemer processes and in electrical and blast furnaces, its large-scale production by rectification of air, and the problem of liquid *versus* medium-purity gaseous oxygen are outlined and discussed in general but lucid terms. There are notes on the cost of medium-purity oxygen. The case for oxygen is closely argued and presented without extravagant claims, and the diagrams are clear and well reproduced. The bibliography includes some recent Russian studies.

**Flame Hardening Process.**—The technique of "Shorter Process" flame hardening was patented in 1925 by Albert E. Shorter, a Sheffield engineer who had served his apprenticeship in the former N.E.R. workshops at Darlington, and the firm of Flame Hardeners Limited, Bailey Lane, Sheffield, has now published a 32-page illustrated booklet describing the Shorter method as applied to cast-iron components, gear teeth, chain and conveyor sprockets, dog clutches, cams, brake drums, shafts, rollers, roller and ball races, and rotary knives.

# The History, Present Situation, and Prospects of the East African Railways*

*Sir Reginald Robins on the part the railways have played, and will play, in developing East Africa*

THE history and development of the East African transport system falls into four distinct phases: the consideration of opening up the territories by railway; the building of the railways and their emergence as part of the economic structure of East Africa; the development period 1922-1948; and the amalgamation of the Kenya & Uganda and Tanganyika Railways in 1948.

The desire to suppress the slave trade was the justification for the proposal to build the Uganda Railway. Eventually, after long controversy, the late Sir George Whitehouse arrived at Mombasa in 1895 to initiate work on the line. After great physical and financial difficulties, the railway reached the shores of Lake Victoria in 1902.

At about the same time the Germans were preparing to build the railways from Tanga and Dar-es-Salaam in the then German East Africa. In 1914 the Governor of German East Africa said "the available districts along Lake Victoria are already opened up by the Uganda Railway. For this reason . . . railways should be built in other directions."

The Uganda Railway was handed over in 1903 to the East African Protectorate. It was a serious financial liability, and only by the development of lands opened up could the burden be lessened. Economically the advent of the European made possible the development of East Africa and raised the economic status of the African.

### Government Administration

The Uganda Railway was administered and operated in those days as an ordinary government department and no one seemed to realise that it might be necessary to spend money to earn money. Eventually the standstill policy turned the railway into a taxing instrument. In German East Africa the railway was no more economically successful, but in 1908, the Germans realised the necessity of providing for a renewals fund to replace worn-out equipment, a realisation not apparent in the British-administered territories.

The post 1914-18 war period opened with the railways in a poor condition, not the fault of those in charge of the transport system, but that of the general policy of administering such an important service as a transport system; but in 1922 Mr. Felling (afterwards Sir Christian Felling) from the South African Railways was appointed General Manager of the Uganda Railway.

He took a courageous step which has left its mark on transport administration throughout the Colonial Empire. He contended that the only way in which the transport systems could play their part in providing a public service was to divorce them entirely from government administration and treat them as quasi-commercial undertakings. His conception was that the Uganda Railway should become a joint state service known as the Kenya & Uganda Railways. He held that parliamentary control should be a broad control of policy and finance. The results of his policy far exceeded expectations.

German East Africa had become Tanganyika and was to be administered as a mandated territory. The first task was to rehabilitate the railway and set up a British organisation. Later the Tanganyika Central Railway became a very important link between the Congo and the East Coast. A serious recession took place in 1930 and 1931, due partly to the world depression, and partly to development of railways on the West Coast of Africa. The recession was overcome with great difficulty in Kenya and Uganda. In Tanganyika it was not possible for the Transport Administration to weather the storm without assistance from the Government, but by the time the 1939 war had broken out there was every prospect of the railway system meeting all its obligations.

### The War Effort and its Effect

It is too often forgotten by those who grumble and criticise, because the transport systems of East Africa cannot do all that is required at the time that it is required, that this is mainly because these two systems spared nothing in their efforts towards the successful prosecution of the war. The consequence is that they have emerged from the war period battered and beaten, only to be faced with problems almost as immense as those encountered during the war.

I now come to the last period—a period with immense possibilities and immense tasks. I refer to the amalgamation of the two railway systems of East Africa into one organisation—the East African Railways & Harbours.

The general conception of Sir Christian Felling has been extended in the administration of the new undertaking. The success of the former K.U.R. & H. was due almost entirely to its methods of higher control, administration, and management, which for this reason have been adopted for the new East African Railways & Harbours.

The suggestion has been put forward that appointments to the new Councils and boards should be made of those with particular interests, but once these principles are accepted, there is no end to the sections which will claim to be responsible for nominations.

### Proposed Committees

If the proposals which I have placed before the Governments for Railways & Ports Committees were adopted, the question of the policy of a westward extension in Uganda would first receive the consideration of a Railway Committee. That Committee would consist of three members of the Transport Advisory Council: in addition, there would be two members appointed by Tanganyika, two by Kenya and two by Uganda.

The Committee would have power to co-opt two additional members with full voting rights from Uganda users. Their recommendations would be considered in turn by the Transport Advisory Council; finally, if it were decided to recommend the extension of the transport system in Uganda, the authority of the Central Assembly would be sought.

There are, in my view, three major railway and port developments which must receive full consideration. One is the extension westwards in Uganda; another, connection between the Kenya-Uganda section and the Central and Tanga sections of Tanganyika, probably by a rail connection between Morogoro and Korogwe—a development which arises partly out of experience gained in the war and partly from amalgamation. The workshops at Dar-es-Salaam cannot be extended materially and it may prove cheaper to provide a connection between the Central Line and the Kenya-Uganda section than to move the workshops.

### Connection with Rhodesia

The last of the three projects is a connection with Rhodesia for strategic and other reasons and to provide an additional outlet from the Rhodesias. With the development of the groundnut scheme, the administration is committed to the construction of a deep-water port at Mikindani and extension of a railway inland 140 miles. This might prove a possible outlet from the Rhodesias; there are difficulties, including either crossing Lake Nyasa by a train ferry or a railway round the head of the lake.

The construction of the railway from Mikindani would be much less costly than the construction which would be involved by a connection elsewhere in East Africa. If this connection with the port of Mikindani were made, it should be possible to economise at Mikindani itself.

These considerations are all hampered by reason of the fact that materials and equipment are difficult to get. The first task is to get sufficient equipment for both the Kenya-Uganda and the Tanganyika sections to enable them to handle without undue delay all the traffic, existing and potential, which may be offering over the next few years. Given goodwill, I am sure that the East African Railways & Harbours can make a considerable contribution to all these objectives and developments, such as raising the standard of living of indigenous peoples and the provision of those facilities which we of the West have been so used to, for the benefit of those who in the past have not shared in the good things of this world.

* Abstract from a paper: "Development of the Transport System and Its Part and Position in the History and Development of East Africa," read by Sir Reginald Robins, C.M.G., O.B.E., Commissioner for Transport, East Africa High Commission, to the Uganda Society on April 6

---

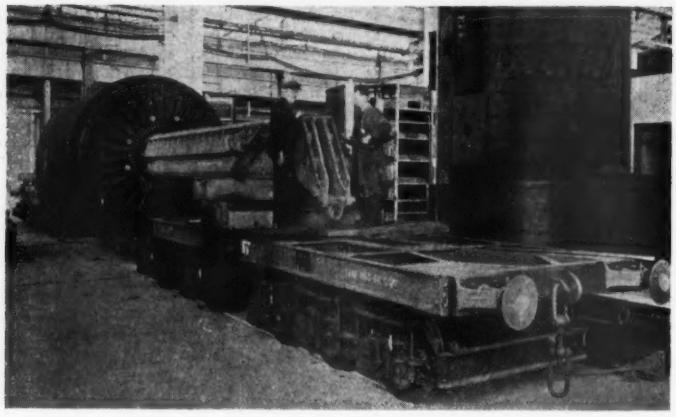
WESTERN REGION MEN'S FIRST AID COMPETITION.—The final of the British Railways, Western Region, Men's First Aid Competition was held at Porchester Hall, Paddington, on May 3. The tests were set by Dr. W. Duncan, of Liverpool, Dr. F. H. Edwards, of Shrewsbury, and Colonel E. J. Selby, of London. The presentation of trophies and awards was presided over by Mr. K. W. C. Grand, Chief Regional Officer, who presented the trophies, and the presentation of prizes was made by Mrs. Grand. The results were as under:—

| | Marks (maximum 500) |
|---|---|
| Newport "A" (winners of Challenge Shield) | 395 |
| Bristol D.S.O. (winners of Carvell Cup) ... | 392 |
| Swindon "B" ... ... ... ... ... | 347 |
| Banbury (winners of Butt Bowl) ... ... | 340 |
| Llandaff ... ... ... ... ... ... | 336 |
| Shrewsbury Loco. ... ... ... ... | 334½ |
| South Lambeth ... ... ... ... | 314½ |
| Weymouth ... ... ... ... ... | 314 |

A vote of thanks to the adjudicators was proposed by Mr. R. Burgoyne, Regional Staff Officer, and a vote of thanks to Mr. and Mrs. Grand by Mr. C. R. Dashwood, Chief Accountant. The Newport "A" and Bristol D.S.O. teams will represent the Region in the inter-railway competition which is being held in the Central Hall, Westminster, on May 20.

# Conveyance of Stators by Rail

*A wagon has been introduced by the North Eastern Region, embodying a girder with a carrying capacity of 150 tons*



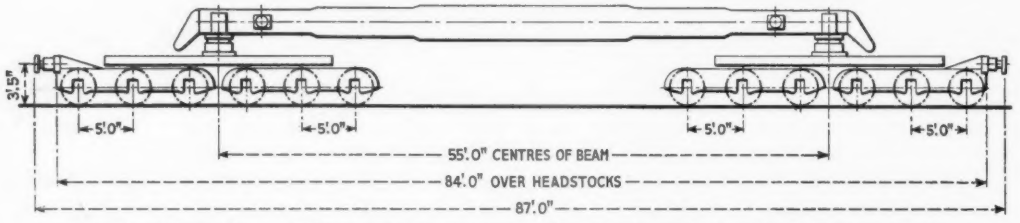
*Loading on the 150-ton stator wagon at Parsons & Co. Ltd. Heaton Works, Newcastle*

DEVELOPMENTS in the design of electric generator plant, involving a reduction in the internal bore of stators and an increase in their weight and size, have necessitated various modifications in the design of the special vehicles used for conveying stators by rail. Accordingly, the North Eastern Region of British Railways recently has put into service a wagon embodying a girder which has a carrying capacity of 150 tons and is capable of passing through a clear bore of 40 in.

The girder weighs 41 tons, and its ends are supported on traversing bolsters, which incorporate a roller cage mounted on bogies and understructures. The traversing is carried out by hand ratchet and permits the load to be traversed 15 in. in either transverse direction during transit, so as to clear bridges and other obstructions. For the heavier loads, cantilever wagons are used to relieve axle loads.

The girder and traversing bolsters were constructed at the Darlington locomotive works of British Railways, and the first of the stators for which they were designed recently was conveyed from the works of Parsons & Co. Ltd., Newcastle, to the Prince of Wales power station, Rotherham.

L.M.R. (LONDON) ORCHESTRAL SOCIETY.—On Friday, May 6, the London Midland Region (London) Orchestral Society presented a vocal and instrumental concert in the former Shareholders' Meeting Room, Euston. The programme was conducted by Walter E. Chalk, assisted by John Grindley. The soloists were Beryl Hatt (Soprano), Arthur Senent (Tenor), and Percival Garratt (Solo Pianoforte & Accompanist). Mr. Chalk, who was making his farewell appearance after conducting the orchestra for 26 years, in a short speech thanked the audience, players, and the officers of the railway for their support in the past, and hoped that they would continue to support the orchestra under its new conductor, Mr. John Grindley.




*Principal dimensions of 150-ton stator wagon recently introduced by the North Eastern Region*

# Mechanics of Wheel and Rail

A PAPER entitled "The Motion of a Railway Axle" recently was presented to the Institution of Mechanical Engineers by Dr. R. D. Davies and Mr. A. F. Cooke, and subsequently this paper has been published in the journal of the Institution.

In this connection, we have received the note below from an engineer, who has what is probably unparalleled experience in practical investigation into this subject. He is Mr. W. E. Gelson, M.Sc., M.I.C.E., M.I.Mech.E., Deputy Chief Controller, Research & Design, Indian Railway Board, who at the present time is on leave in England.

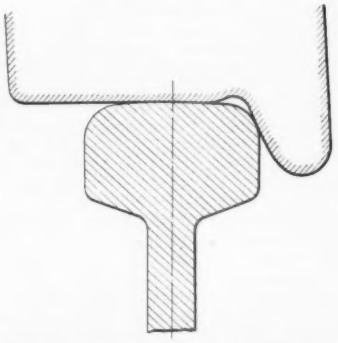
### Indian Railway Research

For many years Mr. Gelson has been conducting extensive experiments into the reactions between rail and tyre, which formed part of a broader research on track instituted by the Indian Railway Board in 1935.

This particular aspect of the work was considerably extended on the recommendation of the influential Pacific Locomotive Committee sent out from this country.

These investigations have been carried out with up-to-date equipment and with the full knowledge of others made in America and elsewhere. The experience gained in India, therefore, has been invaluable.

Mr. Gelson's note states that experimental study of lateral and longitudinal pressure between the axlebox and horn-block of a moving vehicle, in large lateral oscillation, shows that for a considerable proportion of the period, tyre/rail contact occurs in the root radius of a flange, and not on the tread. In view of the appreciable difference in effective diameters of a wheel pair, this is a major factor in promoting instability.



*Proposed small groove at the root of the flange*

Referring to the paper quoted above, Mr. Gelson notes, the authors proposed to turn a small groove at the root of the flange in this connection. To circumvent an objection to a stress raiser in the tyre due to the groove, he suggests that the groove could be similar to that shown in the accompanying illustration. This modification might be applied to express coaching stock and goods brake-vans, seeing that, in such cases, lateral forces recorded in tests have never amounted to more than safe percentages of the vertical wheel loads.

The modification also could be applied to certain tyres of express locomotives, but careful investigation would have to be made before applying it to the tyres of leading axles of bogies and rigid wheelbases, because the factor of safety against derailment at speed by climbing is likely to be affected.

# Experimental Shunting Locomotive on the Norfolk & Western Railway, U.S.A.

*A revolutionary design of coal-burning reciprocating engine with automatic controls and draught independent of cylinder exhaust*

RECENTLY the Norfolk & Western Railway, in co-operation with the Standard Stoker Company, undertook to develop a satisfactory shunting locomotive using coal as fuel, with improved economy, increased availability, and reduced smoke nuisance. In addition, it was decided to apply automatic controls, so that the locomotive could be left unattended when not in use.

The 4-8-0 locomotive selected for the experiment was built in 1910, and had cylinders 24 in. dia. by 30 in. stroke, coupled wheels 4 ft. 8 in. dia., a grate area of 45 sq. ft., a boiler working pressure of 200 lb. per sq. in., and a tractive effort of 52,400 lb.—an average figure for the tractive effort of American locomotives on shunting and transfer services.

To realise the desired improvements, the following changes were made:—

(1) A combustion chamber 4 ft. long was added to the firebox.

(2) A fan driven by a turbine using live steam, was installed in the smokebox, to provide induced draught.

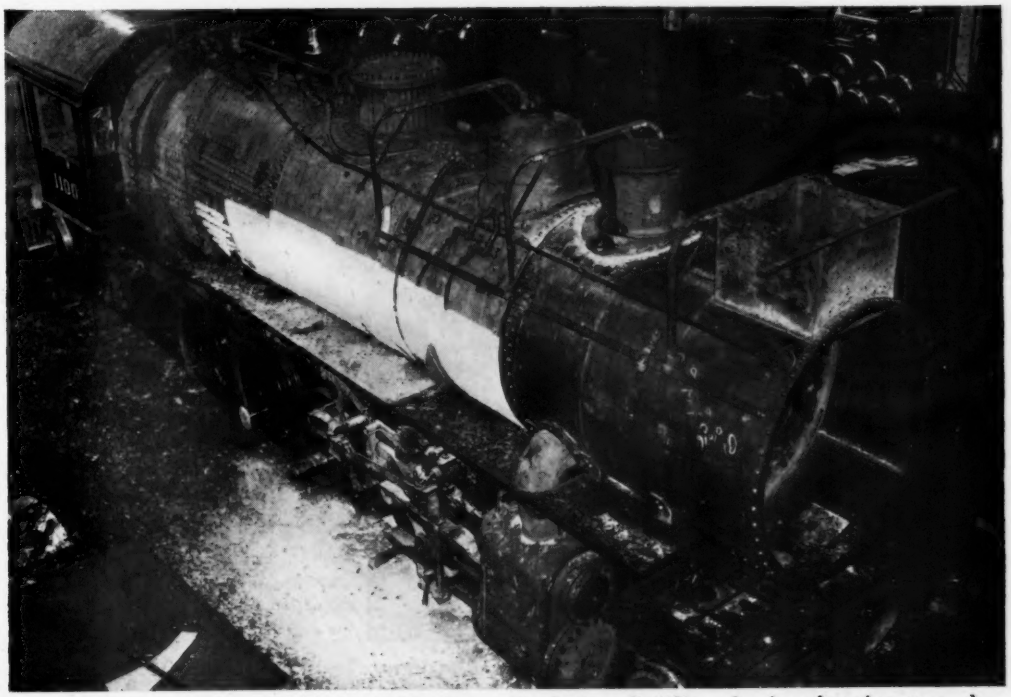
(3) The exhaust steam from the cylinders, instead of being used to produce draught, was arranged to discharge to atmosphere.

(4) Automatic controls were provided to maintain boiler pressure, with a fixed range of air/coal ratio.

(5) Standby devices were applied, to enable the locomotive to be left unattended for a comparatively long period and then made ready for service with full boiler pressure within a few minutes.

(6) The installation of the following details: a Standard type "HT-1" mechanical stoker with a capacity of 4,000 lb. per hr.; Hennessy lubricators on the driving axles; Nathan mechanical lubrication; type "E" radial buffer between engine and tender; overfire air jets; cinder ejectors to return cinders collected in the smokebox to the firebox.

*Norfolk & Western Railway* 4-8-0 *shunting locomotive as originally built in* 1910



*General view of experimental* 4-8-0 *shunting locomotive during rebuilding, showing alterations to smokebox to accommodate induced draught fan*

(7) The use of a tender having a capacity of 11,000 gal. of water and 20 tons of coal.

The leading dimensions of the rebuilt locomotive are as follow:—

| | |
|---|---|
| Cylinders (2), dia. × stroke ... | 24 in. × 30 in. |
| Coupled wheels, dia. ... ... | 4 ft. 8 in. |
| Bogie wheels, dia. ... ... ... | 2 ft. 3 in. |
| Boiler barrel, dia. (max.) ... ... | 7 ft. 7 in. |
| ,, ,, ,, (min.) ... ... | 6 ft. 8 in. |
| ,, ,, length ... ... | 14 ft. 6 in. |
| Height of centre line above rails ... | 9 ft. 11½ in. |
| Maximum height of engine above rails ... ... ... ... | 15 ft. 9⅛ in. |
| Wheelbase : bogie ... ... ... | 6 ft. 9 in. |
| ,, coupled wheels ... | 16 ft. 0 in. |
| ,, total engine ... ... | 27 ft. 1 in. |
| ,, engine and tender ... | 70 ft. 0 in. |
| Working pressure ... ... ... | 200 lb. per sq. in. |
| Heating surface (no superheater) : | |
| Tubes (347 ; 2¼ in. dia.) ... | 2,964 sq. ft. |
| Firebox and combustion chamber | 251 sq. ft. |
| Total ... ... | 3,215 sq. ft. |
| Grate area ... ... ... ... | 45 sq. ft. |
| Tractive effort ... ... ... | 52,457 lb. |
| Weights in working order : | |
| On bogie ... ... ... ... | 17 tons 16 cwt. |
| On coupled wheels ... ... | 106 tons 15 cwt. |
| Total engine ... ... | 124 tons 11 cwt. |
| Tender ... ... ... ... | 94 tons 14 cwt. |
| Total engine and tender | 219 tons 5 cwt. |
| Coal capacity ... ... ... | 20 U.S. tons |
| Water capacity ... ... ... | 11,000 U.S. gal. |
| Factor of adhesion ... ... ... | 4·56 |

The addition of the combustion chamber to the firebox reduced the heating surface of the boiler from 4,315 to 3,215 sq. ft., due to the shortening of the tubes and to the removal of the superheater. The firebox proper was not changed, and the brick arch was retained. Steam-operated dampers, automatically controlled, were provided on each side of the firebox, between the mud-ring and the ash-pan.

The draught necessary for efficient coal-burning is induced by a fan driven by a live-steam turbine. The application of the fan necessitated an extension to the forward end of the smokebox. The fan, supplied by the L. J. Wing Manufacturing Company, has a capacity of 37,500 cu. ft. per min. at 2,600 r.p.m. The dia. of the seven-bladed rotor is 42 in. Steam consumption, when operating at maximum output, is 4,000 lb. per hr., or approximately 67 h.p.

Vertical U-shaped baffles in two staggered rows were placed between the front tube-plate and the fan to remove the large cinders and fly-ash. These are collected in two cinder hoppers in the bottom of the smokebox and returned to the firebox by steam ejectors.

Separate chimneys are provided for the combustion gases and for the cylinder exhaust. The noise nuisance is reduced by the removal of the conventional blast-pipe orifice; and the cylinder horsepower is increased, due to the decrease in exhaust pressure.

The automatic controls for the boiler are pneumatic, and were supplied by the Bailey Meter Company. A pressure of 28 lb. per sq. in. is maintained in the control system; this air pressure is supplied from the main reservoir of the locomotive.

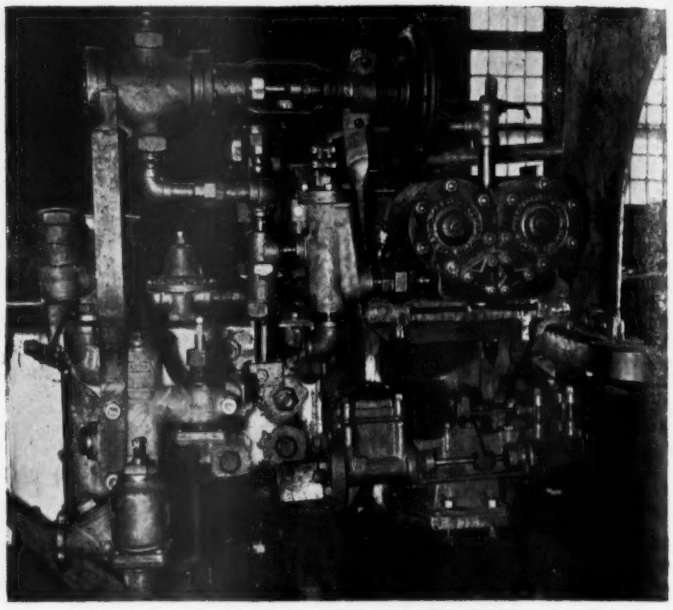
The controls primarily consist of three instruments mounted on a panel on the left-hand side of the back-plate of the boiler. A steam pressure-controller actuates, in the proper sequence, the other instruments in the control system, when the boiler pressure drops below the predetermined figure at which the controller is set.

A selector valve also is provided on the instrument panel, so that the controls readily can be changed from automatic action to hand operation. A third instrument on the panel is a ratio controller, whereby the ratio of air supplied to coal fired may be controlled and varied as desired.

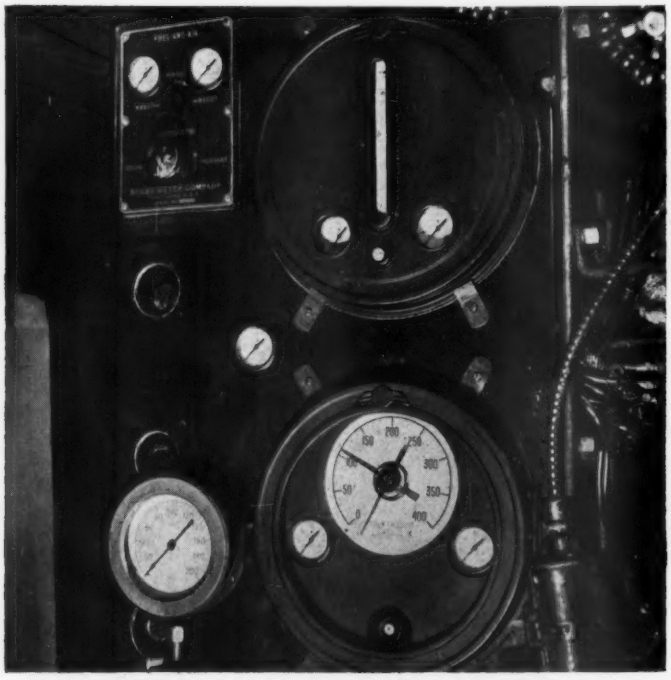
The steam pressure controller supplies air, in proportion to the demand on the boiler, to devices known as Standatrols, which in turn furnish air at a somewhat higher pressure to operate diaphragm steam valves for the fan, stoker blast, and stoker. By these controls, the amount of air induced by the fan as draught through the firebox, and the amount of coal delivered by the mechanical stoker, are proportional to the demand being made on the boiler for steam.

Incorporated in the ratio controller, and actuated by a pressure difference between the draught over the fire-bed and that in the smokebox, is a governor, which maintains the correct operating speed of the

(*Continued on page 528*)

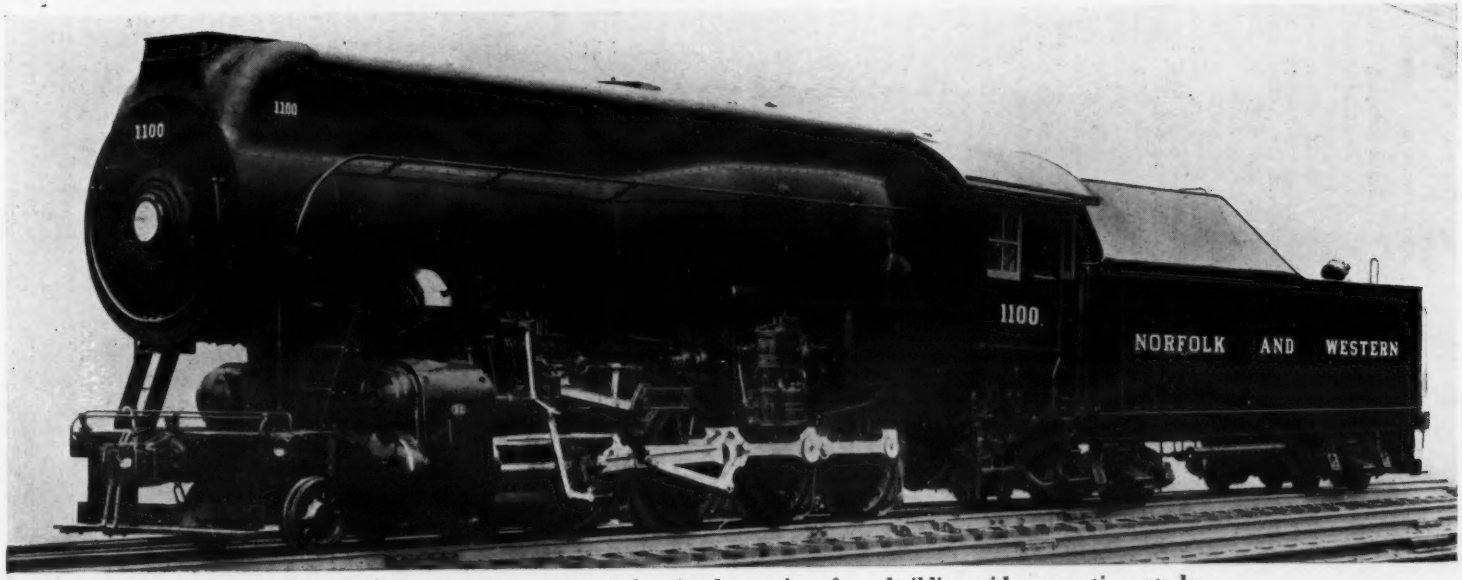


*Close-up view of Worthington duplex feed pump and associated controls on left-hand side of locomotive, below cab*

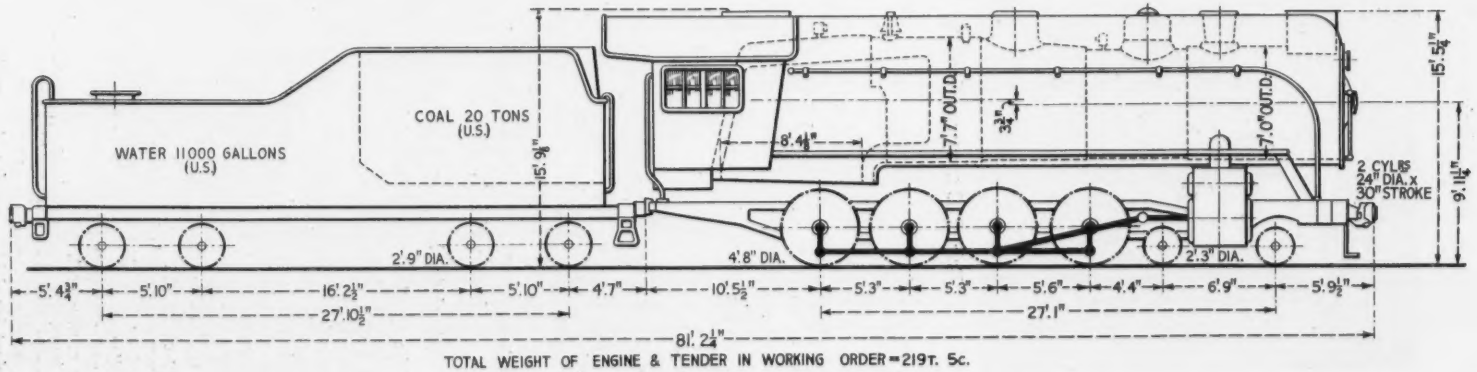


*Control panel with* (1) *selector valve for changing from automatic to hand operation, or vice versa ;* (2) "*ratio controller*" *governing air/coal ratio ; and* (3) *steam pressure controller*

# Experimental Shunting Locomotive on the Norfolk & Western Railway, U.S.A.




*Norfolk & Western Railway* 4-8-0 *shunting locomotive after rebuilding with automatic controls*

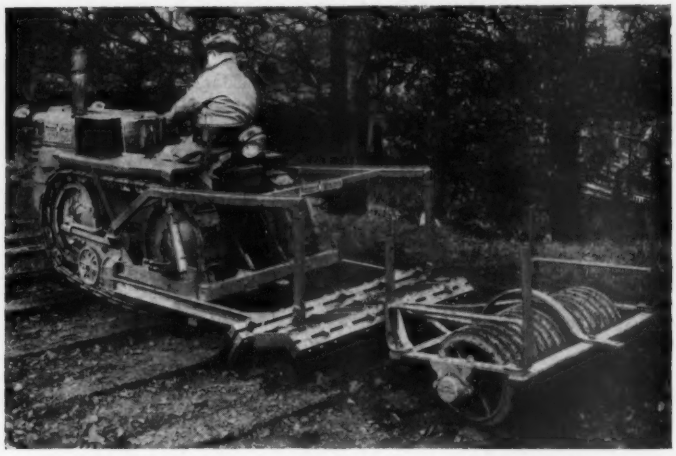



TOTAL WEIGHT OF ENGINE & TENDER IN WORKING ORDER = 219T. 5c.

*Diagram of locomotive showing principal weights and dimensions*

# Civil Engineer's Mechanical Equipment, Western Region

*New mechanical ballast scarifier, and track-relaying crane for use in tunnels*



*Bristol 20 tractor with scarifier and roller at Slough*

THE introduction of time- and labour-saving devices and plant on permanent-way work is receiving constant attention, and one of the most recent developments on the Western Region of British Railways is the adaptation of agricultural harrows for use in breaking-up old sleeper beds when the track is being relayed.

Through the course of years, the ballast immediately underneath the sleepers generally becomes very hard and compacted, and when the time comes to renew the track, it is necessary to break up these hard beds, so that a more uniform and even surface is prepared to receive the track. This work usually is done manually, using picks and shovels, but it is hoped that the plant now being developed will do the job effectively and relieve permanent-way men of an arduous task.

The illustration shows the latest equipment developed on the Western Region, and although this is still in the experimental stage, results so far have been promising. Briefly, the equipment consists of a light crawler, which tows a multi-tine scarifier. These tines have been designed to stand up to the tough work they will have to carry out, and are set in two rows staggered in a frame, which is hydraulically controlled in the vertical direction by the tractor operator. A fluted roller also is towed behind the scarifier, its action being to break up the disturbed ballast, and in addition to achieve some measure of consolidation.

The extension of pre-assembled relaying methods to tracks in tunnels has necessitated the development of a crane which can carry out the work in the confined space of the tunnel, as well as in the open, and, for this purpose, a machine has been constructed on the Western Region by Mr. F. W. Hawksworth, Chief Mechanical Engineer, to the requirements of Mr. A. S. Quartermaine, Chief Engineer.

### Track Relaying Crane

The crane, designed primarily for pre-assembled relaying in tunnels, consists of two crane trucks and a central control vehicle permanently coupled together and requiring, in the present design, engine power for travelling. A 22-kW. diesel generator set mounted on the control vehicle supplies power to a 10-h.p. motor on each of the cranes. The booms can be slewed manually through 360 deg., their normal working position being at 90 deg. to the track. The rope sheaves at the boomheads easily can be adjusted to give lifting radii corresponding to intervals of 6 ft. 6 in., 7 ft., and 7 ft. 6 in., and the crane is designed to lift 6 tons, the combined capacities of the two units, at the maximum lifting radius on an adverse cant up to 4 in.

The crane is operated by one man in the central cabin, and the control levers are duplicated so that operation from either side of the cab is facilitated. The safe working of the crane is assisted by necessary limit switches, and automic electrical controls include an emergency stop button at both driving positions. In case of breakdown, the lifting units can be operated manually from the platforms on each crane.

Since the first full-scale trial in the open, which is illustrated, the crane has been used very successfully on relaying work in the Severn Tunnel. Developments and improvements are in hand for incorporation in additional cranes, which it is hoped will be built. The main dimensions and weights are:—

| | |
|---|---|
| Overall length ... ... ... | 53 ft. 8 in. |
| Length of control vehicle ... | 19 ft. |
| Weight of each crane unit ... | 22 tons 2 cwt. |
| Weight of control vehicle ... | 9 tons 2 cwt. |
| Total weight ... ... ... | 53 tons 6 cwt. |

## Experimental Shunting Locomotive in the U.S.A.

(*Concluded from page 526*)

fan. The speed of the engine driving the mechanical stoker is automatically controlled by an oil tachometer, driven off that engine.

To permit the desired water level to be maintained in the boiler when the locomotive is left unattended for any length of time, a duplex horizontal steam pump, manufactured by the Worthington Pump & Machinery Corporation, has been provided on the left-hand side of the locomotive, below the cab. This pump, which has a capacity of 19 gal. per min., is controlled by a thermo-hydraulic feed-water regulator mounted on the back plate of the boiler. The boiler is provided with a low-water alarm and also with fusible plugs in the firebox crown-sheet.

The improvements made in the locomotive greatly increase its availability. The water capacity of the tender—11,000 gal.—is sufficient for eight hr. service. The coal capacity—20 tons—will last 48 hours under normal operating conditions.

The mechanical lubricator and reservoir have a total capacity of 17½ gal., sufficient for fourteen days' operation. The oil level in the Hennessy lubricators is gauged before each turn of duty and the lubricators are removed for internal inspection once in three months.

In fact, combustion has been improved, with a reduction in the amount of smoke made by the locomotive. A reduction in cylinder back-pressure has been made by eliminating the use of exhaust steam for producing draught. The maintenance of the boiler pressure by automatic controls allows the fireman more time for observation and the safety of operation. Finally, the automatic controls permit the locomotive to be left unattended during periods when desired.

---

NEW EAST COAST SERVICES.—As announced by Sir Eustace Missenden and recorded in our April 29 issue, thirteen extra named trains are being introduced by British Railways on May 23. "The Capitals Limited" will run non-stop each weekday between London and Edinburgh. Two trains, each formed of new air conditioned coaches will operate the service. Restaurant cars will serve table d'hôte and à la carte meals and buffet cars with light refreshments will be available for passengers not requiring the full meal service. Seats will be reservable in advance for passengers from London and Edinburgh. Specially-staffed retiring rooms are being provided for lady passengers. "The White Rose" and "The West Riding" will provide two new restaurant car services between Bradford, Leeds and London, invaluable to business travellers. The buffet car express, "The Fenman," between Hunstanton, Kings Lynn, Bury St. Edmunds and Liverpool Street will run during summer on Mondays to Fridays and, on Saturdays from Hunstanton only. This train will allow Hunstanton passengers almost a full day in London, arriving back the same evening. Details are given below of the running of these expresses. "The Capitals Limited" will leave Kings Cross at 9.30 a.m. and reach Edinburgh Waverley at 5.30 p.m.; there are through carriages for Dundee and Aberdeen. "The White Rose" will leave Kings Cross at 9.15 a.m. and arrive at Bradford at 1.38 p.m. Departure of "The Fenman" from Hunstanton will be at 6.45 a.m., with arrival at Liverpool Street at 10.4 a.m. and return at 4.30 p.m., giving arrival back at Hunstanton at 8.5 p.m. Seats on "The White Rose" and "The West Riding" will be reservable in advance by those travelling from Bradford, Leeds, and Kings Cross, and on "The Fenman" from Hunstanton, Bury St. Edmunds, and Liverpool Street.

## Civil Engineer's Mechanical Equipment, Western Region



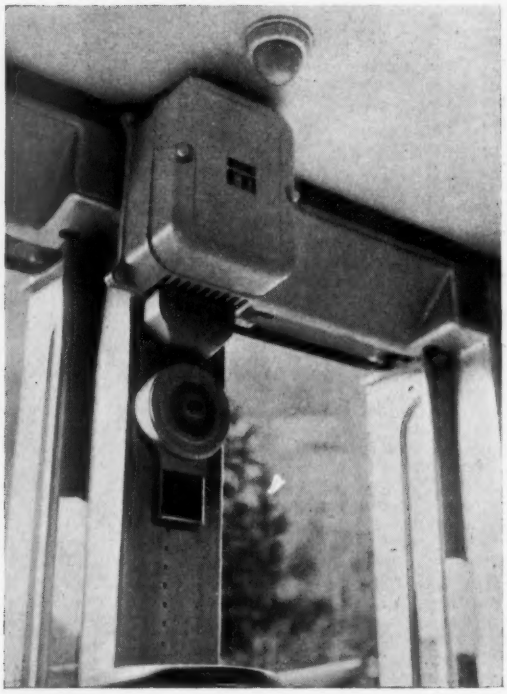
*Relaying with pre-assembled track at Pilning. The length is being butted up into place and guided thus by means of the locating piece seen at the ganger's feet*

# Swiss Federal Railways

*Electro-tractor with luggage trucks attached*

*A chemical weed-destroying unit*

*View of bogie with entrance doors to a modern restaurant car*



*Electric-light regulator and switch of a light-steel passenger carriage*

# RAILWAY NEWS SECTION

## PERSONAL

Mr. R. J. Hillard, Director of Economics & Trade, Sudan Government, has been appointed General Manager of the Sudan Railways, in succession to Mr. R. H. Robertson, who is retiring.

Mr. D. V. Middleton, formerly Chief Mechanical Engineer, Sudan Irrigation, has been appointed Deputy Chief Inspecting Engineer, Sudan Government London Office.

Mr. Roger Chitty, Assistant Solicitor to the Western Region, British Railways, has been appointed Acting Solicitor, Paddington.

Mr. W. Lionel Fraser has been appointed Chairman of Thomas Tilling Limited, as successor to the late Sir Frederick Heaton.

Mr. M. D. Thompson, District Goods & Passenger Manager, Cambridge, Eastern Region, British Railways, has retired.

The Minister of Health has re-appointed Mr. L. F. Rowlandson (sometime Superintendent of Organisation & Staff, L.M.S.R., and lately Master of the British Transport Officers' Guild) as Chairman of the Southport National Health Executive Council for a further period of three years.

Mr. J. M. LeMay, General Agent, Passenger Department, Quebec City, has been appointed to the new post of Assistant to the Passenger Traffic Manager, Canadian Pacific Railway, in Montreal.

Dr. Paul Buchli, at present Assistant to the Director of the Swiss Federal Traffic Office (Dr. R. Cottier), has been appointed Manager of the Rhaetian Railway, in succession to Dr. Ehrhard Branger, who is retiring, as from July 1 next.

### B.T.C. Chief Research Officer

The British Transport Commission announces the appointment of Dr. Henry Edward Merritt, M.B.E., D.Sc.(Eng.), M.I.Mech.E., to be Chief Research Officer on the headquarters staff of the Commission from May 30. In 1948 a committee of eminent scientists, presided over by Sir William Stanier, was invited by the Commission to report on the organisation of research, and recommended that an officer be appointed to advise the Commission on the application of science to its problems and the organisation of research; and to co-ordinate the work of research establishments, encourage the promotion of new research activities, supervise operational research, and disseminate research information. The committee's recommendations were approved by the Minister of Transport, and the appointment of Dr. Merritt, who has been released by the Nuffield Organisation to take up the post, is the first step towards implementation of its report.

We regret to record the death on May 6, at the age of 64, of the Rt. Hon. Viscount Portal of Laverstoke, P.C., G.C.M.G., D.S.O., M.V.O., who was the last Chairman of the Great Western Railway Company, from March, 1945, to December 31, 1947. Lord Portal joined the board of that company in 1927. He resigned his Directorship in September, 1940, on his appointment as an additional Parliamentary Secretary to the Ministry of Supply, but rejoined the board in November, 1944, after he had relinquished his later position as Minister of Works. Lord Portal was born on April 9, 1885, the eldest son of the late Sir W. W. Portal, 2nd Baronet, at one time Deputy-Chairman of the L.S.W.R., and was educated at Eton and at Christ Church, Oxford. During the 1914-18 war he served with the Life Guards, and won the D.S.O. at Passchendaele. He had held a number of public offices. He was an additional Parliamentary Secretary to the Ministry of Supply from 1940 to 1942, and was Minister of Works from 1942 to 1944. When he joined the board of the G.W.R. in 1927 he took an active part, especially, in connection with the schemes for the rehabilitation of the South Wales Special Area. He was also made Chief Industrial Adviser to the Government for the four Special Areas, and administered the three funds in that connection, which were that of the Special Areas Reconstruction Association, that given by Lord Nuffield, and that granted by the Treasury. Lord Portal, who was created a Baron in 1935 and a Viscount in 1945, was Managing Director of Portals Limited, his own family business, which makes banknote paper for this and many other countries, and which has been in existence for over 200 years. He had been President of the British Olympic Association since 1936, and was President of the Fourteenth Olympiad held in England last year, when his services were recognised by his being made a G.C.M.G.

The funeral of Lord Portal took place on May 9 at the Church of St. Mary the Virgin, Laverstoke, Hampshire. Among the large number attending, in addition to family mourners, were Captain Hugh Vivian, Director of the former Great Western Railway Company; Mr. S. B. Taylor, Deputy Secretary, British Transport Commission; Mr. David Blee, Member, Railway Executive; Mr. W. P. Keith, Hotels Executive; Officers of the Western Region: Mr. K. W. C. Grand, Chief Regional Officer, Mr. Allan Quartermaine, Chief Engineer, Mr. Gilbert Matthews, Operating Superintendent, Mr. C. Furber, Commercial Superintendent, Mr. F. C. Hockridge, Surveyor & Estate Agent.

*The late Viscount Portal*
Chairman, Great Western Railway Company, 1945-47

### Colonial Railway Appointments

The Secretary of State for the Colonies has approved the following appointments:—

Mr. S. G. Hudson to be Assistant Mechanical Engineer, East African Railways & Harbours, Tanganyika Section.

Mr. L. E. Steventon, Traffic Manager, Tanganyika Railways, to be Transportation Manager, Malayan Railway.

### Argentine Railways

Lt.-Colonel Jorge Luis Benavidez has been appointed Sub-Manager, General Belgrano Railway, Buenos Aires.

### *Retirements*

The following retirements have taken place among senior staff:—

*General Roca Railway (former B.A.G.S.R.)*: Messrs. F. C. Egerton, Traffic Manager; and G. Brown, B. G. Moverley and B. Bourse, Assistants to General Manager.

*General Mitre Railway (former Central Argentine)*: Dr. Raul Zavalía Lagos, Administrative & Legal Assistant to General Manager; Messrs. D. B. Bulman, Chief of Expenditure Division, and B. W. Raby, Assistant Chief of Expenditure Division, Chief Accountant's Department; R. H. Weitzel, General Manager's Representative for Staff & Labour Matters; A. Vitale, Assistant to General Manager's Representative for Staff & Labour Matters; A. E. Milner, Chief of Commercial Matters, General Manager's Office; C. Díaz Gallardo, Chief of Staff Office.

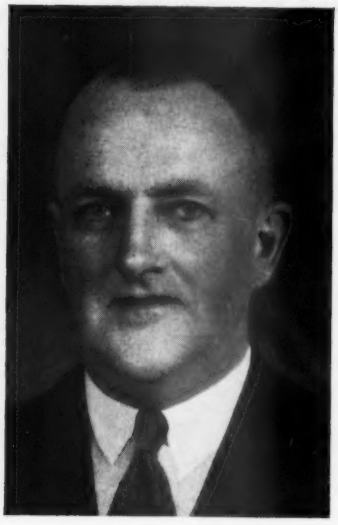
*General San Martin Railway (former B.A.P.R.)*: Messrs. C. E. Grier, Assistant General Manager; and F. Sansoni, Traffic Manager.

Mr. W. H. Taylor, Secretary of the General Managers' Conference, and later Secretary of the Executive Committee.

Mr. M. Barreiro, Chief of the Joint Railway Advertisements Office.

*Mr. R. P. Davis*

Appointed District Freight Superintendent, Paddington, Western Region, British Railways



*Mr. Arthur Higginson*

Appointed District Commercial Superintendent, Barrow-in-Furness, London Midland Region, British Railways

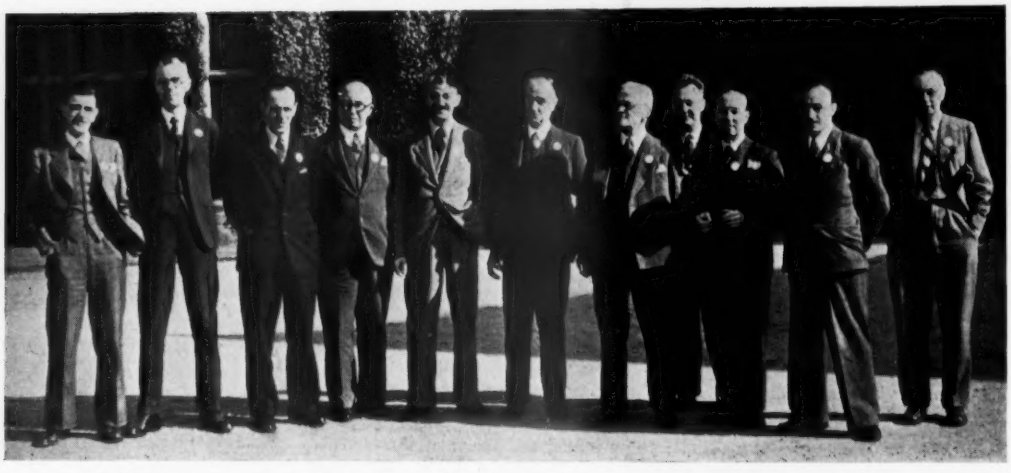
*Mr. C. J. H. Selfe*

Appointed District Commercial Superintendent, Dundee, Scottish Region, British Railways

Mr. R. P. Davis, District Goods Manager, Newport, Western Region, British Railways, who has been appointed District Freight Superintendent, Paddington, joined the Great Western Railway in 1911 in the Divisional Superintendent's Office, Plymouth, and afterwards transferred to the Goods Department there. He saw active service from 1915 to 1919, afterwards resuming duty at Plymouth. In 1922 Mr. Davis was moved to the Chief Goods Manager's Office (Rates Department), and in 1923 was selected for four years training in connection with the company's training scheme for salaried staff, on the conclusion of which he was appointed to the Staff Department, Chief Goods Manager's Office. He subsequently was associated with the work arising from the powers to operate road services conferred on the railways by the Act of 1928, also in connection with schemes for the reorganisation of tranship working which the company carried into effect during 1930-32. In 1933 he was appointed Outdoor Representative (Operating) to the Chief Goods Manager. In 1939 Mr. Davis was made Assistant District Goods Manager, Swansea, and, in 1944, Goods Superintendent, Smithfield. In October, 1945, he took up the duties of Assistant District Goods Manager, Paddington, and in July, 1946, was appointed to the post, which he now vacates, of District Goods Manager, Newport.

Mr. Arthur Higginson, Acting District Goods Manager, Liverpool, Western Region, British Railways, who has been appointed District Commercial Superintendent, Barrow-in-Furness, London Midland Region, commenced his career at Truro, Great Western Railway, in 1910, subsequently moving to Devonport and Plymouth, obtaining experience in commercial matters in the latter district in the ensuing years, with a break in the 1914-18 war, when he served with H.M. Forces in Egypt and France. In 1935 Mr. Higginson was appointed Stationmaster & Quay Superintendent at Fowey, returning in 1938 to Plymouth as Chief Clerk to the District Traffic Manager. In 1940 he went

## Conference on Welding at Ashorne Hill



*A group taken during a recent conference at Ashorne Hill, near Leamington, held between the Institute of Welding and the British Welding Research Association*

*Left to right*: Messrs. J. Murray, Cowlairs, Scottish Region, J. Dearden, Scientific Research Department, L.M. Region, and J. C. Kelly, St. Rollox, Scottish Region, British Railways, Mr. J. S. Campbell, London Transport Executive, Messrs. G. Foster, C.M.E. Department, L.M. Region, O. V. Bulleid, Chief Mechanical Engineer, Southern Region, N. W. Swinnerton, Civil Engineer's Department, L.M. Region, A. Watson, St. Rollox, Scottish Region, and B. R. Byrne, Brighton Works, Southern Region, British Railways, Mr. R. S. Kibbler, London Transport Executive, Mr. F. H. Perkins, Production Manager, North British Locomotive Co. Ltd.

to Oswestry, Central Wales Division, to take up the post of Assistant Traffic Manager, and in 1944 was appointed Goods Superintendent, Birkenhead. In January, 1946, he was promoted Principal Assistant District Goods Manager, Bristol, and in January, 1948, went to Liverpool, Western Region, to the post he has recently vacated. In the recent war he held the rank of Major, Home Guard, and was Liaison Officer for the Central Wales Division, G.W.R.

---

Mr. C. J. H. Selfe, who was recently appointed District Commercial Superintendent, Dundee, Scottish Region, British Railways, entered North Eastern Railway service in 1920, and obtained experience in the Commercial Department under the District Goods Manager, Newcastle, and as relief clerk, until 1929, when he became a traffic apprentice. From March until October, 1933, he was in the Superintendent's Office, Southern Area, L.N.E.R., under Mr. V. M. Barrington-Ward, for "pooling," and then was appointed Commercial Assistant to the Docks Superintendent, St. Andrew's Dock, Hull. In 1935 Mr. Selfe succeeded the Operating Assistant at St. Andrew's Dock. In 1937 he became Dock Agent, Albert & Wm. Wright Docks, Hull, and in 1938 transferred to the District Superintendent's Office, Hull, in connection with the preparation of the A.R.P. scheme for the Hull Docks area. In 1939 he was appointed Goods Agent, Edinburgh (Waverley), and he subsequently received appointments as Assistant District Superintendent, Burntisland (May, 1940); Assistant District Superintendent, Edinburgh (December, 1941); Trains Assistant to Superintendent & Locomotive Running Superintendent (Scottish Area) (June, 1942); Principal Assistant (Operating), Central Traffic Office, Marylebone (July, 1945); and District Traffic Superintendent, Aberdeen (November, 1945).

---

Mr. A. S. Black, Manager of the Scottish Branches of the General Electric Co. Ltd., has been appointed a Director of the company.

---

Mr. Ralph Budd is retiring on September 1 next from the position of President of the Chicago, Burlington & Quincy Railroad, and has been appointed a member of the Chicago Transit Authority board.

---

SEASON TICKET FOR 70 YEARS

When Mr. William Seton Meston, of Burnbank, Inverurie, Aberdeenshire, who is in his 86th year, went to work on April 28, he bought his seventy-first successive yearly railway season ticket for the return journey between Inverurie and Aberdeen. For 70 years he has made the daily train trip each way.

---

PRESENTATIONS TO MR. A. A. RYAN AND MR. G. A. MUSGRAVE

On May 6 the officers of the Eastern Region, British Railways, entertained to luncheon at the Great Eastern Hotel Mr. A. A. Ryan and Mr. G. A. Musgrave, who, as already recorded, retired recently. Mr. C. K. Bird, Chief Regional Officer, presided over a representative gathering, which included Mr. Miles Beevor (British Transport Commission), Mr. J. C. L. Train and Mr. O. H. Corble (Railway Executive) and Mr. W. H. Johnson (Hotels Executive). Afterwards, Mr. Bird presented the retired officers with gifts from their old colleagues. He spoke in appreciative terms of the long service rendered by Mr. Ryan as Hotels Superintendent on the former L.N.E.R., and of the strenuous work performed by Mr. G. A. Musgrave as Motive Power Superintendent (Western Section). Mr. Bird's remarks were supported in brief speeches by Messrs. R. Bell, O. H. Corble, W. H. Johnson, C. Dandridge, E. Coleby, A. R. Dunbar, F. H. Sedgwick, L. P. Parker, F. H. Colebrook and A. Moss.

---

Sir John Morison has been elected a Director of Guest, Keen & Nettlefolds Limited.

---

Mr. J. H. Norton, Traffic Manager, Atlantic Region, Canadian National Railways, has retired, and has been succeeded by Mr. E. A. Ryder, hitherto Assistant to Vice-President (Traffic). Mr. H. B. Parr has been appointed Assistant to Vice-President (Traffic).

---

Mr. Leslie Gamage, Vice-Chairman & Joint Managing Director of the General Electric Co. Ltd., has been elected President of the Institute of Export for the seventh year in succession. He has also been elected Chairman of the Overseas Standards Advisory Committee of the British Standards Institution.

---

MEMORIAL SERVICE FOR SIR FREDERICK HEATON

A memorial service for Sir Frederick Heaton, Chairman, and until recently Managing Director, of Thomas Tilling Limited, was held on May 5 at St. Michael's Church, Cornhill. The Reverend James Wall officiated. In addition to family mourners, those present included Lord Brabazon of Tara, Lord Hacking, Sir Cyril Hurcomb, Sir Thomas Bethell, and Messrs. F. P. Arnold, R. G. Davidson, R. J. Ellery, W. Lionel Fraser, G. H. Iles, G. M. Kydd, Charles E. Lee, Cecil D. Page, P. R. Pollard, B. V. Smith, P. G. Stone Clark and Walter Wolsey. General Managers and other representatives were present also from the many companies with which Sir Frederick Heaton was associated, including uniformed staff from the provincial bus companies of the Tilling group recently acquired by the British Transport Commission.

---

WESTERN REGION WOMEN'S FIRST AID COMPETITION.—The British Railways, Western Region, Women's First Aid Competition was held recently in London, and the result was as under:—

| | Marks |
|---|---|
| Swindon "A" ... ... Florence M. Lean Cup and prizes | 254 |
| Swindon C.M.E. ... ... Mabel A. Potter Cup and prizes | 253 |
| Swindon Stores ... ... Prizes | 231 |
| Paddington ... ... ... | 214½ |
| Newton Abbot ... ... | 198½ |
| Birkenhead Goods ... ... | 177½ |
| South Lambeth ... ... | 138 |

Dr. M. M. Scott was the adjudicator in the team test, and Colonel E. J. Selby in the individual tests. The subsequent proceedings were presided over by Mr. R. Burgoyne, Regional Staff Officer, and the presentation of trophies and prizes made by Mrs. Burgoyne. The chairman was supported by the adjudicators, also Dr. H. H. Cavendish Fuller, Chief Medical Officer, Railway Executive, and Messrs. H. R. Webb, Stores Superintendent, W. H. Bodman, Staff Assistant to Chief Mechanical Engineer, K. Griffiths, Staff Assistant to Operating Superintendent, C. W. Powell, Divisional Superintendent, Dr. C. T. Newnham, Assistant Medical Officer, Miss E. Brenan, Welfare Supervisor for Women, Messrs. P. Anstey, Ambulance Centre Secretary, and J. A. Martin, Assistant Centre Secretary, Western Region. The Swindon "A" team will represent the Western Region in the Women's Inter-Railway Competition arranged to take place at Central Hall, Westminster, on May 20.

INTERNATIONAL MECHANICAL ENGINEERING CONGRESS.—Following the success of the first International Mechanical Engineering Congress at Paris in September, 1948, the British Engineers' Association announces that it has been decided to organise a second congress in 1949. The theme of this congress, which again will be held in Paris, will be "Production Efficiency." In accordance with the suggestions made by a large number of the 1948 delegates, a less onerous programme of formal sessions has been arranged and the general organisation will allow the fullest opportunity for delegates to make personal contacts. The congress will be held between September 12 and 17.

## Staff & Labour Matters

### N.U.R. Wage Claim

In our issue of April 29 we referred to representations by the National Union of Railwaymen to the Minister of Labour in connection with their demand for a flat rate increase of 12s. 6d. a week for railway staff. This was declined by the Railway Staff National Tribunal in their Decision No. 11, dated March 18, 1949.

Following this approach to Mr. Isaacs a new claim was submitted by the N.U.R. to the Railway Executive on May 2. This claim is for a flat rate increase of 10s. a week for all salaried and wages grades employed by the Railway Executive and also for the payment of time-and-a-quarter for all time worked between 12 noon and 12 midnight on Saturdays, this enhanced payment to be independent of any night duty or overtime rate which may be applicable.

At a meeting on May 6 between representatives of the Railway Executive and the National Union of Railwaymen, Mr. J. B. Figgins, General Secretary of the N.U.R., stated the reason why the claim had been submitted; Mr. W. P. Allen, Member for Staff of the Railway Executive, replied that the matter would receive the serious consideration of the Railway Executive. It was agreed that another meeting should be held soon.

The claim for enhanced payment for Saturday afternoon working follows the decision of the Independent Arbitration Tribunal, dated February 23, 1949, in connection with a claim by the Transport and General Workers' Union that the rate of pay on Saturdays after 1 p.m. should be at time-and-a-half for road operating, semi-skilled and unskilled maintenance staff, and certain miscellaneous grades of the London Transport Executive. The Tribunal awarded that the remuneration of those workers concerned in the claim, whose duties are scheduled on the basis of a rostering of duties for six days in every pay-roll week, should be increased by the following amounts an hour:—

| | Increase an hour |
|---|---|
| Operating Staff— | |
| Central buses; Drivers & conductors ... | 9d. |
| Trams & trolleybuses; Drivers & conductors | 8½d. |
| Country buses & coaches; Drivers & conductors | 8d. |
| Maintenance Staff ... ... ... ... | 7½d. |

The above amounts apply for all work after 1 p.m. on Saturdays.

# Sir Cyril Hurcomb on Trade and Transport

*Address to National Union of Manufacturers*

Sir Cyril Hurcomb, Chairman of the British Transport Commission, at the annual luncheon of the National Union of Manufacturers on May 4, said that he realised that representative bodies of traders like the National Union of Manufacturers had to be vigilant of the interests of their members when they depended on the use of public services, including transport, and members expected, rightly, to have effective channels through which to make representations on facilities and charges.

It was sometimes assumed that transport operated by a corporation which is the creation of the State must inevitably be more costly and less flexible, more remote, and less responsive than services otherwise provided. This need not be so, and he assured the union that the Commission would always welcome representations, and even complaints, if they enabled mistakes to be corrected or to make improvements during the formative stage.

### Effect of the Transport Act

The object and the effect of the Transport Act was to make possible for the first time a continuous long-term policy for transport. The unification of the railways, completing a process started in 1921, opened the way at last to completely co-ordinated rail operation from one end of the country to the other. That policy was being rapidly and fully exploited, in extensions of through working, in the avoidance of intermediate marshalling, and in many other ways.

In road transport, the Road Transport Executive was rapidly building an organisation and assembling a fleet which would offer a nation-wide service for the carriage of goods by road, co-ordinated with that of the railways. These road services would replace some of the little-trafficked branch lines, but they would not be merely complementary. They would provide the specialised service of the road vehicle for those traders who, for one reason or another, required or preferred their goods to be carried in that way.

The amalgamation of the canal and river system under the Docks & Inland Waterways Executive should enable the neglected waterways to play a greater part in the carriage of the bulk commodities which did not require the speedier service supplied by rail or road.

On the railways the shortage of locomotives had been overcome. Great efforts had been made to reduce the number of wagons under or awaiting repairs, which was now down to less than 9 per cent. of the book stock, the lowest figure for four years, while the absorption of the private owners' wagons made complete common user a permanent feature of the arrangements for wagon distribution. No difficulty had been experienced last winter in moving the increased output of coal or the higher production of steel, although special requirements under the latter head had been heavy. The railways were lifting from the steel works more than 200,000 tons a week, over 10 per cent. more than a year ago, and recently had reached an all-time record in weekly wagon carrying loads.

Nearly 20,000 containers of various types were now available, enabling door to door services to be effected with savings in packing and reduction in handling. Increasing use was being made of the complementary services of rail and road transport under zonal collection and delivery schemes. Rail provided the trunk service between railheads, and road services connected railheads with sub-railheads, besides covering the collection of traffic from consignors and delivery to consignees. A comprehensive scheme covering the whole country on these lines had been prepared, and 142 sections of it were in complete operation, while another 80 were operating in part. This was a field in which the combined use of road and rail services had to be directed to secure the full policy of integration required by the Transport Act.

Additional braked and partly-braked express freight trains were being progressively introduced, and already numbered about 7,000 a month, providing one-day service between many centres. Weekly mileages of such trains had already nearly reached the pre-war figure. Last year over 316 new freight trains had been introduced and 500 services had been accelerated. Periodical and intensive transit tests were now being made to provide data on which to base the schemes for future improvements, and though a one-day freight service to all parts of the country for general merchandise must be an ideal, and many traffics would neither need nor justify that amount of expedition, it was intended to move further towards it.

He was frequently asked in what order the long-distance road hauliers were being acquired. The answer was that priority was determined by the following factors or a combination of them: size and importance of the firm; special experience and capacity of managers or staff; ability of administrative and accounting machine to cope quickly with substantial additional work; suitability of premises, including room for expansion; location; and traffic considerations.

For a considerable period, however, there would remain a large number of hauliers under "A" and "B" licences who had carried out some long-distance work in the past, but not on a scale which made their businesses compulsorily acquirable under the Act. Many of these operators would be enabled to continue their services under permits, in so far as they fitted in with the national scheme of long-distance road haulage.

"More and more we shall aim to sell transport as a unified service, offering road and rail services sometimes as alternatives and sometimes in combination, together with allied facilities, where appropriate, by waterway and at the docks. In many cases, on the basis of quoted rates and conditions, we hope that traders will leave us to employ the method which enables us to make the most advantageous use of the resources available," said Sir Cyril Hurcomb.

"On price I can say nothing new. We are confident that we shall effect economies and, indeed, we must do so, but they can only accrue slowly. Costs have risen against us and in many directions much more steeply than the charges which we make. Passenger traffic will, I hope, respond to the improved facilities which the Railway Executive is offering and the extension of cheap fares.

"Railway finance must continue to be the predominant factor in the financial results and prospects of the Commission—though London Transport is important and road haulage will become increasingly so. The general level of 55 per cent. above pre-war railway charges cannot be said to be exorbitant. We are well aware of the danger that general or flat increases in charges on merchandise might easily bring into operation the law of diminishing returns, even if we were monopolists—and we are far from being that.

"What I want to put to you is that the profitability of any public transport system, and particularly its railway section, where fixed charges are necessarily high and operating costs cannot be easily or rapidly adjusted to fluctuations in traffic, must depend on the volume of support which it attracts from trade and industry.

"In the country's present difficulties about capital investment, it must be a national advantage that the equipment of the railways and the facilities for public transport by road, which have been created at vast expense and are being brought back to proper standards of maintenance and will be improved and developed, should not be duplicated bit by bit. With your co-operation we are anxious to move forward in the provision of faster services, the use of containers, mechanisation of handling through pallets or other modern means, and in the other directions which will enable us to carry your goods more expeditiously and more economically. But if we are to do these things, we need the traffic, and while we recognise that we operate in a competitive field, and shall be realists in our charging policy, we have still to remember that, taking one year with another, we must pay our way.

"While I claim your support for this great enterprise of nationalised transport, we would not expect it to be given blindly or without full regard to your own interests. We are anxious to take the principal bodies representative of trade and industry into consideration. For example, in connection with the charges schemes which we shall submit in due course to the Transport Tribunal, it is our intention at an early date to prepare a document explaining the principles of the general structure of the suggested charging scheme, covering such matters as classification; conditions of carriage; method of calculating distances; small consignments; livestock.

On the basis of that document we then propose to discuss these important matters with this union and other similar bodies with a view to explaining them and ironing out possible differences before the scheme is formally submitted to the Tribunal.

---

**Abolition of Level Crossings on N.E. London Electrified Lines.**—A start has been made on a new bridge under the Central line extension between Leyton and Leytonstone Stations to replace the level crossing which previously connected Church Lane on the East side of the railway with Grove Green Road on the West. This is the last of the substitution works provided for in the North East London electrification scheme for suburban lines of the former L.N.E.R. The bridge will carry three main-line electrified tracks, two sidings, and a cast road, and is expected to be completed early next year. The main contractors are W. & C. French Limited. Matthew T. Shaw & Co. Ltd. are fabricating the steelwork, to be erected at the site by Askham & Palin Limited. The consulting engineers to the Essex County Council are Messrs. Rendel, Palmer & Tritton.

# Beyer, Peacock & Co. Ltd.

*Captain Hugh Vivian reports a year of continued progress and increased profits*

The annual general meeting of Beyer, Peacock & Co. Ltd. was held in London on May 10, with Captain Hugh Vivian, M.I.Mech.E., Chairman of the company, presiding.

The Chairman, in a statement issued with the report and accounts, said that work in progress and stocks of stores and materials were more than £100,000 higher than last year. Sundry debtors and payments in advance also showed an increase of over £100,000. These increases were offset by a reduction in the amount of cash in hand and at bankers by about £270,000. Issued and paid-up capital at £900,000 remained unchanged. General reserve had been increased by a transfer from the profit and loss balance of £50,000 and now stood at £150,000. The carry-forward on profit and loss account showed an increase of about £10,000 compared with the previous year.

Sundry trade and other creditors were higher by about £7,000, whilst the deposits under terms of contract were lower by £76,000, due to the execution of certain contracts in 1948 in respect of which advance payments had been received. Owing to a fortuitous combination of items, full provision for current taxation was slightly lower than last year. The question of dividend proposals had received careful consideration, but in view of the request of the Chancellor of the Exchequer that for a further year industry should again exercise restraint regarding increases in dividends, the directors felt that they were unable to recommend any increase.

### Increased Net Profit

The net profit was £88,709, as compared with £56,127 for 1947; after setting aside £25,000 for contingencies, and considering the difficulties of trading during the year under review, it was felt that the results would not be regarded as unsatisfactory. It would be seen from the consolidated profit and loss account of the company and its subsidiaries, that the combined profit was nearly £30,000 higher than the previous year. This position was most gratifying and evidence of the wisdom of their policy of expansion and development into new fields. Negotiations were still proceeding with the Inland Revenue Authorities in respect of the question of taxation liability.

Throughout 1948 the volume of output was again controlled by the amount of available skilled labour. Consistent efforts were made during the year to increase the labour strength to facilitate expansion of production programmes. Unfortunately, it was not possible to augment the personnel to any appreciable extent, owing to the overall shortage of suitable skilled employees in the locomotive industry, while the problem of maintaining the various grades of skilled labour in balance required constant attention. Difficulties continued in respect of the volume of material supplies, but towards the end of the year under review there was a limited degree of improvement in supplies of components. It was hoped that during the current year the position would become more satisfactory, particularly in regard to basic material supplies.

The problem of shipping locomotives as completed had been more acute in recent months, and in view of shipping difficulties they had, wherever possible, made special arrangements for temporary storage of completed locomotives at the docks, pending shipment.

### Overseas Demand

The current order book included Beyer-Garratt locomotives for Rhodesia, West Africa, South Africa, East Africa, Australia, Chile, Brazil, and Burma, and engines and tenders for Australia and Peru. The volume of locomotive contracts today was of such proportions that their manufacturing facilities should be employed for a considerable time ahead. Although some recession in the "seller's market" appeared to have taken place, the position so far as they were concerned was that an overseas demand for steam locomotives—particularly of the Beyer-Garratt type—still remained unfulfilled.

Despite the increasingly difficult problems facing the exporter today, due to high costs, import restrictions, and currency and exchange control regulations, their contribution to the volume of exports increased during the year. Deliveries included 20 Beyer-Garratt locomotives to the Rhodesian Railways. These 20 Beyer-Garratts brought the total of this now famous type, known as the 15th Class, to 34, while a further 30 of the same type were under construction. On delivery of these 30 engines, the total stock of Beyer-Garratts on the Rhodesia Railways would amount to 119 engines, representing over 75 per cent. of the total tractive effort used on the main line. The General Manager of this railway, in his 1947 annual report, made eulogistic reference to their performance, stating: "It is interesting to note that four 15th Class locomotives averaged 244,537 miles between general overhauls, and were even then in comparatively good condition; engine No. 271 ran a record mileage of 261,980 . . ." Their company also executed a contract for large engines and tenders for the Turkish State Railways. These engines were 10-coupled, weighing in working order 169 tons. This order was a postponed contract originally booked before the outbreak of the war. All the locomotives were now in service between Haydarpasa and Ankara.

Repeat orders of successful types built were also shipped to Brazil and the Gold Coast, whilst a quantity of three-cylinder passenger engines and tenders of new design was supplied to the Great Northern Railway (Ireland). These new locomotives were giving first-rate service in hauling the "Enterprise" passenger express on the non-stop run of 112 miles (80 m.p.h. in places) between Dublin and Belfast. They had been commented on most favourably.

Personal contact with overseas customers in South Africa and Rhodesia was renewed last year by a visit from their Managing Director. Mr. Wilmot made an extensive tour to survey possibilities of future business and on his return was able to report that their products enjoyed a very high reputation for excellence of design, quality of materials and workmanship; and that the locomotives in service were giving satisfaction on the various railways. At the present time Mr. W. Cyril Williams, Sales Director, was in South Africa, whilst other executive technical officers of the company had visited various countries to study the operation of locomotives supplied from Gorton, to furnish on the spot any technical advice which might be required, and to obtain first-hand up-to-date information on recent developments and trends overseas.

Their board was fully aware of the developments taking place in various forms of traction other than steam, and the major problems affecting the application of tractive effort to railway transportation were engaging the close attention of the senior technical officers. Further research and development into other fields was being undertaken. During the year, they had applied their new self-adjusting pivot centre to locomotives for service in various parts of the world, and had also fitted the new Hadfield power reverse gear to locomotives they were manufacturing, and had supplied it to other locomotive manufacturers. These two items were indicative of progress in the technical field.

For many years the board had been considering the possibilities of a pension scheme for the staff, and during the year a start had been made by the inauguration of a scheme for the officials of the various companies in the group. This would help to put the company on an equal footing with its competitors in this respect, and was an important point in attracting the services of high-grade executives necessary for the successful operation of the company. It was hoped that at an appropriate time there might be some extensions to this scheme.

This was the last occasion on which he would preside at the annual general meeting in the capacity of Chairman, and it might not be inappropriate briefly to review some of the more important aspects of developments since 1937. For over 15 years it had been the policy of the board to broaden the basis of their manufacturing activities. The locomotive industry was peculiar in that it was a major exporting industry without a foundation of regular home trade, and this being so, it was particularly vulnerable to cyclical trends in international industry and finance. Very largely the industry itself was impotent in respect of peaks of prosperity and valleys of depression. The briefest study of the locomotive industry for 100 years showed how these factors had become intensified with the grouping of British railways since the first world war, and with the growth in many countries of nationalist tendencies which restricted the activities of the British exporter.

### Subsidiary Activities

During his period in the chair the board had steadily pursued and developed a policy of broadening the basis of manufacturing interests. The Richard Garrett Engineering Works at Leiston, Suffolk, acquired in 1932, had become a large manufacturer of machine tools, and had developed departments for the design and manufacture of light electrical consumer goods, components, and a wide range of equipment for metal treatment and finishing. It had developed industrial refrigeration under a separate company, called Low Temperature Developments Limited, the whole of the capital of which it held. This latter company had a fine record of success in new fields over a short period of years.

The turnover of these two subsidiary companies was now considerable and had become a major factor in the stability of the group. They were also pioneering new methods of food growing and conservation on their farms at Leiston, Suffolk, and were interested in the mass production of certain electrical ceramics, in the production of high-grade metal toys, the erection of large steel structures, and in the rust-proofing of steel by automatic means for application in areas where corrosion is a major factor. It was the belief of the board that

along such lines the foundations of the Beyer Peacock structure might be strengthened, and so increase the security of both proprietors and employees in times of trade depression in one or other of the industries concerned. It had been a privilege to be Chairman during such remarkable achievement in rehabilitation.

He would like to express his great indebtedness to his colleagues on the board, and to the officials, staff, and employees of the constituent companies, for their invariable loyalty, enthusiasm, and co-operation during the years of his Chairmanship. They prized very highly the team spirit, and the board had striven hard to achieve such a spirit. It was with real pleasure that he was able to tell them that Mr. H. Wilmot would be succeeding him as Chairman. They had been closely associated for many years and he knew that the future of the company could not be in more capable hands.

The spirit of enterprise and far-sighted planning which had proved so successful augured well for the future development of the company. In these days it was difficult to see far into the future, particularly in relation to the export trade, and in mentioning the outlook for the future, such comment as he made must necessarily be governed by the general proviso that there was no serious deterioration in conditions of international trading. At the present time their order books in all the constituent companies were at levels which the board considered satisfactory, and unless there was some serious development between now and the end of the year, he hoped that the financial results would be at least as favourable as those now laid before them.

The report and accounts were adopted.

## Brush Electrical Engineering Co. Ltd.

*Ordinary dividends resumed*

The annual general meeting of the Brush Electrical Engineering Co. Ltd. was held in London on May 5, Sir Ronald W. Matthews, Chairman of the company, presiding.

The Chairman, in a statement issued with the report and accounts, said that the improvement already apparent in the position of the company in 1947 had continued throughout 1948. The directors felt justified, therefore, in recommending a resumption of dividend on the ordinary shares, and he would like to draw particular attention to two factors which had weighed with the board in making this recommendation.

First, the directors had felt that, before recommending the resumption of ordinary dividends, the reserves should be restored to a figure in excess of the amount taken from that source in 1946. This had now been achieved.

Second, the stockholders would recall that the 1946 accounts had a note thereon to the effect that provision for the modification of Brush Ljungstrom turbines had been initiated in 1947, and should be completed in 1951, at a total cost to the company of approximately £300,000.

In the years ending December 31, 1946, and 1947, a total sum of £150,000 had been put aside to cover a portion of the estimated expenditure under this heading. This year a further £150,000, which it was felt should be sufficient to cover the balance of the estimated expenditure, had been set aside.

During 1948 the Brush Electrical Engineering Co. Ltd. attained an output of over £6 million. He thought they would agree that this figure, representing as it did an increase of very nearly one-third over that for 1947, showed a truly remarkable effort by every one concerned.

### Substantial Order Book

Turning now to the future prospects of the company, he proposed to deal with the position on the basis of the merger which came into effect on January 7 last. The total order book at that date was in the neighbourhood of £20 million, which would provide some 18 months' work at the rate of output they were now achieving. It was a gratifying fact that in spite of the substantial increase in output which had been achieved over the past twelve months, orders came in during 1948 at a faster rate than they were delivering.

In the first two periods of 1949 this excess of input over output had continued, although output in the first two periods of 1949 was some 30 per cent. above that achieved for the same two periods of 1948.

They had set themselves a production target in 1949 well in excess of that achieved in 1948, despite a temporary disorganisation at two of their works consequent on the removal of small engine production from Loughborough to Staines. This transfer was now almost complete.

Subject always to the possibility of unfavourable developments in international affairs or to some grave deterioration in the economic situation of the country, he felt justified in saying that their prospects for 1949 were bright. No one could tell how world conditions would develop, but the results which were available to the directors for the first two periods of 1949 showed that invoicing in those two periods was 30 per cent. in excess of that achieved in the similar periods of 1948.

There was little likelihood of duplication of orders such as had occurred with consumer goods. They could say that, with the exception of one or possibly two departments, the bulk of the orders placed with the group were for capital goods from customers of long standing, and there was little likelihood of any serious cancellations. The two departments to which he referred accounted for only some 5 per cent. of the entire order book.

The report was adopted.

## Extensive Track Relaying at Lewisham Junction, Southern Region

Important engineering work involving complete track renewal at Lewisham Junction, one of the most complex and most heavily-trafficked on the Southern Region, will be carried out during Sunday morning, May 15, and completed on Saturday and Sunday, May 21 and 22.

Lewisham Junction, six miles from Charing Cross, is on the lines from Charing Cross to Dartford *via* Blackheath, Bexleyheath, and the Dartford Loop Lines, and to Addiscombe, Hayes, and Sanderstead. Some 600 trains pass over the junction every 24 hr. The track layout to be renewed includes some 40 crossings and 8 sets of points. The whole junction is controlled by colour-light signalling from St. Johns Signal Box.

So that inconvenience to the public may be reduced to a minimum the work will be carried out in two stages. Lewisham Station will be closed to traffic on Sunday morning, May 15, until 10.0 a.m., after which a normal service will again operate. During the following weekend work will be carried out from 3.30 p.m. on Saturday, May 21, until 2.0 a.m. on Monday, May 23, when the station will again be closed.

The train services principally affected will be those *via* the Bexleyheath line, which will be reduced from four to two an hour, and will run *via* Charlton and Blackheath. North Kent Line trains *via* Blackheath will be diverted *via* Greenwich, and those on the Mid Kent and Dartford Loop lines will run from Ladywell and Hither Green respectively direct to St. Johns and *vice versa* instead of calling at Lewisham Station.

During the time Lewisham Station is closed railway tickets will be accepted by London Transport bus or tram services between St. Johns and Lewisham and between Ladywell Station and Lewisham. There will also be a special bus service between Lewisham and Charlton *via* Blackheath, which will cater for passengers from Lewisham to the North Kent and Bexleyheath lines.

## Indian Railway Accountants Conference

The first conference of the South Indian Railway Accounts Society was held on March 12, under the Presidency of Mr. K. Sadagopan, Financial Adviser & Chief Accounts Officer, South Indian Railway, and Director Designate of Finance, Indian Railway Board. In the course of his address, Mr. Sadagopan emphasised the need for railway accountants and auditors to maintain high professional standards, particularly in the present set-up of the accounts and finance organisation on railways.

The following papers were read at the conference:—"Depreciation Fund on Railways," by Mr. S. Natarajan; "Railway Betterment Fund," by Mr. A. S. Viswanathan; "Leakage of Revenue," by Mr. K. Guruswamy; "Machine Methods of Accounting," by Mr. M. K. Kalyanaram.

Of the discussions, that concerning the depreciation fund was particularly interesting. Mr. S. Somasundaram, Deputy Chief Auditor (Statutory Audit), expressed the opinion that the contribution to depreciation fund might be confined to major assets, such as rolling-stock, while concerning other assets, the cost of replacements and renewals might be debited to revenue as and when such replacements and renewals were made, following the practice on the American railways.

Mr. B. G. Balakrishnan, Senior Accountant, added that, in determining the amount to be provided for replacements and renewals, the relative intensity of use of assets, such as machinery, and the possibility of obsolescence of existing assets, due to modern inventions, particularly in the case of mechanical and electrical equipments, should be taken into account.

Mr. V. R. Riley, Deputy Chief Accounts Officer, was of the opinion that, apart from the depreciation fund, a separate fund, to meet the cost of premature replacements on account of obsolescence, should be created on railways.

# Canadian Pacific Railway Company

*Gross earnings the highest recorded, but net earnings the lowest for forty-three years*

The annual general meeting of the Canadian Pacific Railway Company was held recently in Montreal, Mr. W. A. Mather, President of the company, presiding.

The President said that the 1948 report showed that, with gross earnings at the highest level in the history of the company, net railway earnings were the lowest for any year since 1905, despite the maintenance of a high degree of operating efficiency. The ratio of net to gross earnings was less than one-third of the corresponding ratio even in the years 1930-1937, which included the worst depression years. Net earnings of $18,400,000 from railway operations were little more than one-third of the earning power of $52,332,000, which the Board of Transport Commissioners in 1948 found reasonable.

It was no less important to Canada than to the Canadian Pacific that the company should have adequate revenues to enable it to keep pace with and assist in the expansion of industry. It was a fallacy to assume that there was no need to trouble about the return from railway operation while income from other sources was maintained at a satisfactory level. "Other Income" was derived mainly from steamships, hotels, and the company's interest in the Consolidated Mining & Smelting Company. Often in the past the hotels and steamships showed a loss, and only temporary high world prices allowed the smelting company to pay an unusually large dividend. In years when these investments produced a profit, the Canadian Pacific should surely not be required to use such profit to provide railway transport.

Mr. Mather then explained the position of the company in relation to that of the Canadian National Railways, whose securities were backed by Dominion Government guarantee. Any surpluses of the Canadian National have been turned over to the Dominion and applied by the Government in repayment of loans made to the railway for capital purposes. The Canadian Pacific, on the other hand, could borrow only in a highly competitive money market, and to provide efficient service it had to earn consistently a reasonable return.

During the past year of great national prosperity neither system had been able to pay its way. Since 1930 the company had been empowered to increase the ordinary stock from $335,000,000 to $500,000,000, but the discount at which its stock was bought and sold in the open market precluded the offering of additional stock to the public. It was highly important that this situation be corrected without delay.

### Capital Expenditure

Prolonged opposition to an increase in freight rates has forced a restriction of desirable capital expenditure, and the programme for 1949 was only about equal to the total depreciation charges for the year. However, as mentioned at the previous year's meeting, depreciation based on original cost fell far short of providing for replacements when, as at present, the purchasing power of the dollar was so much less than it was when the assets being replaced were originally acquired.

Canada was in a period of expansion resembling that of the early 1900s, but the company, because of inadequate returns, could not continue capital expenditure, embarked on in the past in confidence of satisfactory returns, to cater for settlement and industrial growth. This spirit of confidence was a major factor in opening up Western Canada, and it was in the national interest that the company should again be placed in a position to play an important rôle in such developments. This obviously would not be possible so long as the rate of return on the net investment of the company in transport property remained at the low level of recent years. In 1948 this reached the extremely low figure of 1·8 per cent. It was to be hoped that in the interest of providing the most efficient transport these conditions would be corrected in the near future.

The recent Budget contained three features of interest to the company: the revision of income-tax regulations regarding amortisation allowances for depreciable properties; the increase in income tax rate from 30 to 33 per cent., entailing a further substantial tax payment before provision for dividends; and the removal of the 15 per cent. tax on passenger fares. The total increase in passenger revenue from the last mentioned and increases in first class and "coach" fares is estimated at $2,600,000 for a full year at the present level of traffic.

On the other hand there was to be faced an approximately equal amount as a result of the order of the Board of Transport Commissioners removing, from July 1, the "mountain differential" applying to certain British Columbia traffic.

It is expected that the periodical review of the pension position now under way will show the heavier cost of providing for the present scale of pensions.

### Increase in Pensions

Substantially higher wages rates make inevitable an increase in the average pension becoming payable in the future. If it is possible to carry out the work now scheduled for this year, greater headway than in 1948 will be made in overcoming deferred maintenance. A Royal Commission on Transportation has been appointed to inquire into and report on important questions of transport policy, and the views of the company on all phases of the inquiry will be placed before it.

Gross earnings in the first quarter of 1949 were higher than in the same period of 1948 by $7,999,910, or 10·3 per cent., but this was more than offset by increased expenses mainly resulting from higher wage rates. Approximately $10,000,000 extra revenue resulted from the 21 per cent. increase in Canadian rates as from April 8, 1948, and from traffic affected by United States rates.

Grain, petroleum, and smelter product loadings were higher, but the total volume of freight carried was less than in the first quarter of 1948, with a decrease of 2·6 per cent. in wagon loadings. Although the decline in total freight volume might continue for some time, it was hoped that it would not be the pattern for the entire balance of the year.

The new ship, *Princess Marguerite*, has gone into service on the Vancouver, Victoria, and Seattle run. Delivery of the sister ship, *Princess Patricia*, is expected in early summer. The Trans-Pacific air service is scheduled to begin on July 13, the delivery date of the aircraft having been considerably advanced.

Mr. Mather concluded by saying that the company was striving constantly to modernise its services and increase their efficiency. He believed that public opinion would support their efforts to secure adequate revenues, so that they might take advantage of the developments in the science of transport to the benefit of the public and the company.

# Railway Students' Association Convention

Sir Cyril Hurcomb, Chairman, British Transport Commission, and President of the Railway Students' Association, London School of Economics & Political Science, will open the annual convention of the Association on Monday, June 27. The provisional programme for the convention, which is being held at Maclay Hall, University of Glasgow, is as follows:—

*June* 26.—All-day steamer trip from Bridge Wharf, Glasgow, down the River and Firth of Clyde to the Isle of Arran coast and back.

*June* 27.—*Morning:* Paper and discussion (subject and author to be announced). *Afternoon:* Reception by the Lord Provost of Glasgow. *Evening:* Visits to Polmadie motive power depot and Cadder marshalling yard.

*June* 28.—*Morning:* Paper on "Shipbuilding Development," by Sir Alexander Murray Stephen, Alexander Stephen & Sons Ltd., shipbuilders and engineers, Glasgow. *Afternoon:* Visit to a shipbuilding yard. *Evening:* Visits to Central Station and St. Enoch Station Signal Cabin, Glasgow. Return to London by night trains from Central and/or St. Enoch Station.

# Questions in Parliament

### London Transport Users' Consultative Committee

Mr. A. Albu (Edmonton—Lab.) on May 2 asked the Minister of Transport whether he was in a position to announce names of the members of the Transport Consultative Committee for the London area.

Mr. Alfred Barnes (Minister of Transport): In reply to a question by Mr. Albu on February 21 I said that I was considering the setting up of a Transport Users' Consultative Committee for London. I have now decided to set up such a committee to cover both passenger and goods traffic in the area of the London Transport Executive. Steps will be taken shortly to consult representative bodies regarding the appointment of members.

Mr. Albu: Can the Minister give an assurance that among the bodies will be the North London Traffic Facilities Committee, which is representative of North London local authorities?

Mr. Barnes: No, I cannot at this stage give an undertaking on what bodies will be consulted, but if they represent local authorities as such, they would certainly have representation.

Mr. Peter Thorneycroft: When this body is set up, will it be consulted about the numbers who can travel in buses?

Mr. Barnes: Mr. Thorneycroft, who was a member of the standing committee on the Transport Bill, knows that that was one of the purposes for which these committees are being established.

# Notes and News

**Swiss Order for Metal Sleepers from France.**—The Swiss Federal Railways decided recently to place an order for 5,000 *tonnes* of metal sleepers with French firms. A credit of Swiss francs 2,450,000 has been earmarked.

**Superintendent Engineer Required.**—Applications from qualified candidates are invited for the post of superintendent engineer required by the Iraqi State Railways for two years, with possible extension. See Official Notices on page 539.

**Railway Students' Association.**—The annual general meeting of the Railway Students' Association will be held at the London School of Economics & Political Science, Houghton Street, Aldwych, at 6 p.m., on Wednesday, May 25.

**Cheap Rail Trips from Glasgow.**—Half-day excursions are being run to over 70 destinations from Queen Street, Buchanan Street, and St. Enoch stations, Glasgow, between May 6 and May 22. Among the places to which the trips have been arranged are Aberdeen from Buchanan Street; Edinburgh, Galashiels, Kelso, Leven, Newcastle, North Berwick, and Whitley Bay from Queen Street; and to various Ayrshire coast resorts from St. Enoch Station. During the same period over two dozen "breather" excursions are being run from Central and Queen Street stations to Ayr, Gourock, Aberfoyle, Portobello, etc.

**Vulcan Foundry Limited.**—The profit of the Vulcan Foundry Limited for the year ended December 31, 1948, after charging £81,748, against £112,473, for taxation, amounted to £73,705, as compared with £58,853 for the previous twelve months. After deducting £10,000 (nil) transferred to reserve for pensions, £30,000 (£35,000) transferred to general reserve, £2,750 (£2,750) for the dividend on the 5 per cent. cumulative preference stock for the year, and adding £52,257 against £61,366 brought forward, there is an available balance of £83,212 (£82,469). The directors recommend a dividend of 5 per cent. (same) and a bonus of 1½ per cent. (same) on the ordinary stock, both less income tax, which together will absorb £30,212, carrying forward £53,000 against £52,257.

**Railway Cartage.**—The Western Region of British Railways has inaugurated for cartage supervisors a series of courses aimed at stimulation of thought and free discussion on the numerous aspects of railway cartage. The first of these courses was opened at Weston-super-Mare on May 2. Further details will be given in our next issue.

**Toulouse Electrical Equipment Exhibition.**—An exhibition of large electrical machinery and railway equipment will be held by the French National Railways at Toulouse from May 21 to June 6. The exhibits will be housed in the Municipal Sports Stadium section, the Banleve hydraulic laboratory, and a section of the Raynal Station.

**Southern Region Ambulance Competition.**—Twelve teams of men and six teams of women, from among the 2,500 trained ambulance staff of the Southern Region, British Railways, competed in the Regional finals held recently. The winners from the men's teams were Horsham, with 463 marks out of a possible 600, and the runners-up Exmouth Junction No. 2, with 417; these teams will represent the Southern Region in the inter-Regional competition to be held at Central Hall, Westminster, on May 20. Horsham won the challenge shield for the second year in succession, and also won the Moore Cup. The full results were as follow:—

| | |
|---|---|
| Horsham | 463 |
| Exmouth Junction No. 2 | 417 |
| Ashford Works | 414 |
| Waterloo | 409 |
| Exmouth Junction No. 1 | 407 |
| Hove | 401 |
| Eastleigh | 398½ |
| New Cross Gate | 363 |
| Southampton Docks | 353½ |
| Ashford Motive Power | 349 |
| Victoria | 340 |
| Twickenham | 325½ |

WOMEN'S COMPETITION

| | |
|---|---|
| Southampton Docks | 447½ |
| Audit Accountant's Office | 424 |
| Eastleigh | 344 |
| Audit Accountant's Beginners | 333½ |
| Nine Elms | 289 |
| Selhurst | 200 |

The judges were Doctors L. M. Maybury, Portsmouth; H. Rosenberg, Worthing; T. W. Herdman Porter, Faversham; W. A. R. Mailer, London; Sheila Niall, Uxbridge; K. F. M. Pole, Rainham; and Mary E. Rolston, Haslemere. At the conclusion of the competition, which was organised by Mr. F. A. Trott, Regional Ambulance Centre Secretary, trophies and prizes were presented to winners by Mrs. R. M. T. Richards, wife of the Acting Chief Regional Officer.

**Agreed Charges.**—Applications for the approval of 93 further agreed charges under the provisions of section 37 of the Road & Rail Traffic Act, 1933, have been lodged with the Transport Tribunal. Notices of objection must be filed on or before May 17 next.

**Metropolitan-Cammell Carriage & Wagon Co. Ltd.**—For the year ended December 31, 1948, the net profit amounted to £253,180, compared with £163,670 in the previous year. The company's results are published with those of the English Steel Corporation Limited in the annual report of Cammell Laird & Co. Ltd., which holds 500,154 ordinary £1 shares in the company.

**Day Train Attendants Withdrawn.**—As from May 9 day train attendants employed on certain trains from Kings Cross and Marylebone and cross-country services in East Anglia have been withdrawn. The former L.N.E.R. was the only main-line company to employ day train attendants, and in view of the present need for economy, their retention is not considered justified. Night attendants on sleeping cars will be retained.

**Diesel Railcars Proposed for County Down Railway.**—A suggestion that diesel railcars should be introduced on the Belfast & County Down Railway was made by Mr. J. M. Andrews, M.P., speaking at a meeting in Comber recently, when a resolution was passed protesting against the Ulster Transport Authority proposal to close the railway, with the exception of the Bangor and Castlewellan lines. Mr. Andrews said that the introduction of diesel railcars would reduce substantially the uneconomic and unnecessary competition between road and rail services. The

## Southern and London Midland Regions Ambulance Competition Finals

*Mrs. R. M. T. Richards, wife of the Acting Chief Regional Officer, Southern Region, presenting the Challenge Shield to the Horsham team (see accompanying paragraph)*

*Mr. G. L. Darbyshire, Chief Regional Officer, London Midland Region, presenting the Challenge Shield to the Camden "A" team (see paragraph in our last week's issue, page 508)*

# OFFICIAL NOTICES

*None of the vacancies on this page relates to a man between the ages of 18 and 50, inclusive, or a woman between the ages of 18 and 40, inclusive, unless he, or she, is excepted from the provisions of the Control of Engagement Order, 1947, or the vacancy is for employment excepted from the provisions of that Order.*

## Government of Iraq

APPLICATIONS from qualified candidates are invited for the following post:—

SUPERINTENDING ENGINEER required by the Iraqi State Railways for two years, with possible extension. Salary, according to qualifications and experience, between I.D. 120 and I.D. 130 a month (I.D. 1 equals £1), plus cost-of-living allowance I.D. 24 a month. Free passages. Candidates must be Chartered Civil Engineers or possess a University degree recognised as granting exemption from Sections A and B of Institution of Civil Engineers' Examination, and must have had wide experience in building and structural engineering, and preferably with a knowledge of Railway Work. Apply at once by letter, stating age, whether married or single, and full particulars of qualifications and experience, and mentioning this paper, to the CROWN AGENTS FOR THE COLONIES, 4, Millbank, London, S.W.1, quoting M/N/24693/3D on both letter and envelope.

THE RAILWAY HANDBOOK provides the railway student with a collection of useful statistics and information relating to the railways of Great Britain and Ireland. In addition, in matters of international interest, such as speed and electrification progress, the book extends its scope to cover the whole world in order to present a complete picture of these increasingly-important developments. 120 pp. Dy. 8vo. Paper covers. *Price 5s. By post 5s. 3d. The Railway Gazette, 33, Tothill Street, London, S.W.1.*

RAILWAY AMALGAMATION IN GREAT BRITAIN. By W. E. Simnett. An authoritative account of the course of railway amalgamation in Great Britain up to the end of 1923. Cloth. 8¼ in. by 5¼ in. 276 pp. *15s. By post 15s. 7d. The Railway Gazette, 33, Tothill Street, London, S.W.1.*

THE WORK OF THE RAILWAY CLEARING HOUSE, 1842-1942. An account of the development and extent of the activities of this famous British railway institution. Paper. 9½ in. by 6 in. 24 pp. Illustrations. *2s. 6d. By post 2s. 8d. The Railway Gazette, 33, Tothill Street, London, S.W.1.*

THE FIRST PASSENGER RAILWAY. By Charles E. Lee. A history of the Swansea & Mumbles Railway, which extends over 136 years. Cloth. 8½ in. by 5½ in. 91 pp. Illustrated. *5s. By Post 5s. 3d. The Railway Gazette, 33, Tothill Street, London, S.W.1.*

meeting also passed a resolution approving the action of the Down County Council and of the urban and rural councils in opposing the closing of the railway.

**Institution of Civil Engineers.**—The annual general meeting of the Institution of Civil Engineers, Great George Street, Westminster, S.W.1, will be held on May 24, at 5.30 p.m.

**London Coach Trips Start Again.**—London Transport announces that a limited service of "Seeing London" trips by coach will begin on May 16. The services will operate daily, except Sundays, and will cover the West End, the City, and Windsor. All tours will start and finish at Victoria Coach Station.

**Naming Ceremony at Waterloo.**—Southern Region "Merchant Navy" Class locomotive No. 35024 was named *East Asiatic Company* at Waterloo Station on Thursday, May 5. It is the first of the "Merchant Navy" class to be painted in the new blue livery. The ceremony was performed by H.R.H. Prince Axel of Denmark. The officers present from the Southern Region included Mr. O. V. Bulleid, Chief Mechanical Engineer, who presided, Mr. H. A. Short, Acting Deputy Chief Regional Officer, and Mr. S. W. Smart, Superintendent of Operation.

**Southern Railway Dramatic Society.**—With the performance of its fourteenth production—"Full House"—at the Scala Theatre, London, on Friday, April 22, the Southern Railway Dramatic Society commenced another season. In the audience were many members of the British Transport Commission, Railway Executive, and Docks & Inland Waterways Executive, and Regional officers, including Mr. John Benstead, Deputy Chairman of the British Transport Commission, and Mr. R. M. T. Richards, Acting Chief Regional Officer, and Mr. H. A. Short, Acting Deputy Chief Regional Officer, of the Southern Region. Since the society was formed at the outbreak of the last war nearly £2,000 has been raised for various charities. The society's rehearsals take place in one of the arches on which Waterloo Station is built; this arch has been converted into a small theatre and is equipped with modern apparatus built entirely by the society's members.

**West Coast Service Improvements.**—The re-introduction of non-stop runs between Glasgow and London and a new service between Glasgow and Oban are features of the Anglo-Scottish and Scottish Summer timetables which begin on May 23. The 10.0 a.m. "Royal Scot" between Glasgow Central and Euston will run the 401¼ miles non-stop and arrive at Euston at 6.20 p.m. A service expected to be popular with tourists is a new Glasgow-Oban train which is to run *via* Helensburgh and the junction between the former West Highland and Caledonian lines at Crianlarich. The routing of the train is a departure from traditional practice, but its introduction marks the natural development of the integration of railway operation in Scotland. The train starts from Glasgow Queen Street at 9.31 a.m. and runs *via* the West Highland line to Crianlarich and thence over the Callander and Oban line to Oban where it arrives at 1.15 p.m. Calls are made at Helensburgh Upper at 10.15 a.m., Crianlarich 11.32 a.m., Loch Awe 12.12 p.m. and Connel Ferry 12.56 p.m. The return train leaves Oban at 6.25 p.m., arriving at Glasgow Queen Street at 9.56 p.m., with intermediate calls as on the outward journey. The new service will connect with the 8.10 a.m. train from Edinburgh Waverley and on the return journey with the 10.5 p.m. from Glasgow Queen Street to Edinburgh Waverley.

**Buenos Aires Central Railway Transfer Completed.**—The purchase by the Argentine Government of the Buenos Aires Central has been completed. Two contracts of sale were necessary, one which has been signed with the British debentureholders and the other with Señor Federico Lacroze, representing the shareholders. The former document provided for the cancellation of the debentures of the nominal amount of £4,541,500, and all outstanding interest, in exchange for a total payment of £950,000. The shareholders are being paid 5,920,000 pesos for their holdings of 6,000,000 pesos, but out of the purchase price they are called on to make payments totalling 4,373,486 pesos specified in the sale agreement.

**B.E.A. Easter Traffic.**—It is reported that on the Thursday before Easter, April 14, British European Airways operated 21 services to Paris, carrying 566 passengers, or three times the normal schedule. The total load factor from London to Paris was a fraction below 100 per cent.

**Aer Lingus Credit Vouchers.**—From May 1, Aer Lingus has been offering a 10s. credit voucher on its Dublin-London route and a 7s. 6d. credit voucher on its Dublin-Liverpool-Manchester route, to passengers who leave Dublin on services up to 8 a.m. It is hoped these arrangements will relieve pressure on the mid-day and evening services, and may be used later as part payment for tickets on any of the company's routes, except to Paris and Amsterdam.

**Mr. John Elliot on his Victorian Tour.**—Mr. John Elliot, Chief Regional Officer, Southern Region, British Railways, already has concluded his tour over the Victorian Government Railways main-line system, which has involved 2,000 miles of travel. Mr. Elliot has expressed the view that,

**Mr. John Elliot in Victoria**

*Mr. John Elliot, C.R.O., Southern Region, British Railways, with Mr. N. C. Harris, Chairman of the Victorian Railway Commissioners, talking to Driver F. Myers and Fireman N. Fry before leaving for a tour of the Victorian main-line system (see paragraph above)*

though the railways of Victoria are short of staff, coal, and steel, being worse off in this respect than British railways have ever been, their standards are fully up to those at home.

**Revision of C.I.E. Fares.**—In our March 18 and 25 issues we gave details of the increase in rail and road fares over the Coras Iompair Eireann system which had been sanctioned by the Irish Minister for Industry & Commerce. The new railway fares came into effect on Sunday, May 1. Single fares are increased by ¼d. a mile, but return fares at reduced rates are re-introduced. An announcement will be made shortly of new cheap fares for day excursions, weekend visits, market day shopping, touring parties, organised excursions, and others. The new provincial bus fares and rates for passengers' luggage, etc., and for unaccompanied parcels, took effect on and from Monday, May 2.

**Horse Organisation for British Railways.**—A new organisation dealing with the purchase, care, and maintenance of British Railways stud of 7,500 horses recently has been brought into operation. The country has been split up into four territories, each under the control of a Horse Superintendent, responsible to a Chief Horse Superintendent, who is, in turn, responsible to the Executive Officer (Road Transport) at Railway Executive headquarters; the centres of the territories are Glasgow, Manchester, Birmingham, and London. Horse buying has been concentrated in the hands of the Chief Horse Superintendent. The working stables remain under Regional control, but the stud depots and hospitals are directly controlled by the new Horse Superintendents, who provide the professional and technical facilities.

## Forthcoming Meetings

May 14 (*Sat.*).—British Railways, Southern Region, Lecture & Debating Society. Visit to Aldershot & District Traction Co. Ltd.

May 14 (*Sat.*).—Permanent Way Institution, Manchester & Liverpool Section. Visit to Crosville Motor Services shops at Chester.

May 16 (*Mon.*).—Institute of Traffic Administration, Merseyside Centre, at the Adelphi Hotel Liverpool, at 7.30 p.m., "The Transport Bill," by Mr. G. Patterson.

May 17 (*Tue.*)—Institution of Civil Engineers, Great George Street, Westminster, London, S.W.1, at 5.30 p.m. "The New Hawkesbury River Railway Bridge, New South Wales, Australia," by Major-General A. C. Fewtrell.

May 18 (*Wed.*)—Oxford Railway Society, at Jesus College, at 8.15 p.m. "The Railway Salesman," by Mr. C Grasemann, Public Relations Officer, Southern Region, British Railways.

May 19 (*Thu.*).—British Institution of Radio Engineers. London Section, at the London School of Hygiene & Tropical Medicine, Keppel Street (Gower Street), W.C.1, at 6 p.m. "Electronics in Heavy Industry," by Dr. W. Wilson.

May 20 (*Fri.*)—May 23 (*Mon.*).—British Railways, Southern Region, Lecture & Debating Society. Visit to France.

May 20 (*Fri.*).—Railway Club, 57, Fetter Lane, London, E.C.4, at 7 p.m. "Some Suggested Improvements in Anglo-Scottish Train Services," by Messrs. M. D. Greville and H. A. Vallance.

# Railway Stock Market

Sentiment has been governed more by news from China than by Berlin developments. British Funds reacted, with British Gas stock, the premium on which had come down from 25s. to 11s. 3d. as a result of the announcement that £40 million of the stock has been issued to the National Debt Commissioners at £100½. Transport 3 per cent. (1978-88) took its cue from the new Gas Stock, easing to 102⅞, while Transport (1967-72) was 102¼, and Transport (1968-73) 102⅜. It has been pointed out that, allowing for the dividend carried by the price, there is little difference in the yield on Gas stock and Transport (1978-88), and the latter is the shorter-dated than Gas stock.

Brazilian bonds have claimed more attention than Brazil rails, which have receded moderately in the absence of any fresh take-over rumours, but it is being suggested that an official statement is likely to be made at the end of this month or in June. The belief continues that a £10 million take-over for Leopoldina would allow the various debentures to receive par, *plus* a full payment for interest arrears. It is difficult to form any definite opinion as to the position of the ordinary stock. The preference stock may have interesting possibilities, depending on whether its share-out terms would allow for the fact that this stock is cumulative as to dividend and that its arrears date as far back as 1930.

Leopoldina Railway ordinary and preference stocks at 10 and 31 respectively have been fairly steady, while the debentures held all but a small part of recent gains, the 4 per cent. being 92½, the 6½ per cent. 126½, and Leopoldina Terminal 5 per cent. debentures firm at 91½. Great Western of Brazil shares, after easing, strengthened to 133s. San Paulo ordinary stock at 161 also rallied. In the case of San Paulo it is assumed that the price of the ordinary stock would be nearer £200 than its current level granted a fair compensation agreement in respect of assets in Brazil.

United of Havana 1906 debentures have firmed up to 12½. Canadian Pacifics receded to 17⅞, and the rising trend in expenses emphasises the need for higher freights. In other directions Manila "A" debentures were 92 and the preference 8s. 3d. Antofagasta ordinary and preference were 8 and 54. Beira Railway bearer shares have been steady at 50s. 6d. Mexican Railway 6 per cent. debentures were 86½ and Cordoba Central "B" have risen further to 76.

Road Transport shares remained firmly held. B.E.T. deferred stock, however, continued to fluctuate, being lower on balance at £1,790. B.E.T. results are due in a few weeks. It is expected that B.E.T. will re-affirm its intention not to enter into voluntary take-over negotiations with British Transport.

Iron and steel shares have been firmer and rather more active, led by Sheepbridge which advanced strongly to 75s., on details of the engineering subsidiary. Staveley have been active and higher; also Guest Keen. The market is wondering if other companies will follow the lead of Sheepbridge by forming their non-steel assets reprieved from nationalisation into a subsidiary with a separate Stock Exchange quotation. Babcock & Wilcox at 72s. 6d. and Imperial Chemical at 46s. 9d. have been firm.

Shares of locomotive building and kindred companies kept mostly steady. Hurst Nelson were 75s., Gloucester Wagon 51s. 3d., Central Wagons 93s. 9d., and North Central Wagon (4s. paid) 13s., while Charles Roberts were 136s. 3d. and Wagon Repairs 5s. shares 20s. 6d. Vulcan Foundry changed hands around 23s., North British Locomotive were 21s., and Beyer Peacock 22s.

## Traffic Table of Overseas and Foreign Railways

| | Railways | Miles open | Week ended | Traffics for week: Total this year | Traffics for week: inc. or dec. compared with 1947/48 | No. of week | Aggregate traffics to date: Total 1948/9 | Aggregate traffics to date: Increase or decrease |
|---|---|---|---|---|---|---|---|---|
| South & Central America | Antofagasta... ... | 811 | 1.5.49 | £ 66,020 | + £ 19,330 | 17 | £ 1,194,440 | + £ 260,550 |
| | Bolivar ... ... | 174 | July, 1948 | $28,960 | − $69,357 | 30 | $471,287 | − $301,893 |
| | Brazil ... ... | — | — | — | — | — | — | — |
| | Cent. Uruguay ... | 970 | 6.11.48 | 32,712 | + 2,978 | 18 | 593.105 | − 7,652 |
| | Costa Rica ... ... | 281 | 31.1.49 | 35,772 | − 3 648 | 31 | 250,009 | + 12,870 |
| | Dorada ... ... | 70 | Mar., 1949 | 30,857 | + 11.157 | 13 | 90,570 | + 31,070 |
| | G.W. of Brazil ... | 1,040 | 30.4.49 | 38,100 | + 4,800 | 17 | 675,300 | + 9,900 |
| | Inter. Ctl. Amer. ... | 794 | Feb., 1949 | $999,184 | − $183,327 | 8 | $2,088.986 | − $382.179 |
| | La Guaira ... ... | 22¾ | Apr., 1949 | $122.721 | + $6,828 | 17 | $452.474 | + $44.942 |
| | Leopoldina ... ... | 1,920 | 30 4.49 | 44.070 | − 5,498 | 17 | 784,165 | − 162,060 |
| | Midland Uruguay ... | 319 | Sept., 1948 | 19.608 | + 3,123 | 12 | 67,355 | + 16,721 |
| | Nitrate ... ... | 382 | 30.4.49 | 15.607 | + 2,575 | 17 | 139,226 | + 39,865 |
| | N.W. of Uruguay ... | 113 | Sept., 1948 | 5,686 | − 1,213 | 12 | 16.335 | + 1,989 |
| | Paraguay Cent. ... | 274 | 29.4.49 | £99,650 | + £36.834 | 43 | £4,463,884 | + £1,573,734 |
| | Peru Corp. ... | 1,059 | Apr., 1949 | 233.380 | + 34,097 | 43 | 2,050,151 | + 323,588 |
| | Salvador ... ... | 100 | 31.12.48 | c267,000 | + c16,000 | 26 | c776,000 | + c53,400 |
| | San Paulo ... ... | 153¼ | — | — | — | — | — | — |
| | Taltal ... ... | 156 | Mar., 1949 | 11.410 | − 395 | 39 | 80.340 | + 9,930 |
| | United of Havana ... | 1,301 | 30.4.49 | $423,709 | − $84,823 | 43 | $12,206,549 | − $3,881,292 |
| | Uruguay Northern | 73 | Sept., 1948 | 1,072 | + 52 | 12 | 3,308 | + 111 |
| Canada | Canadian National... | 23,473 | Mar., 1949 | 10.359,000 | + 696,250 | 13 | 28.911.500 | + 2,244,000 |
| | Canadian Pacific ... | 17,037 | Mar., 1949 | 7.722.750 | + 636,250 | 13 | 21.389.500 | + 2,000,000 |
| Various | Barsi Light* ... | 202 | Mar., 1949 | 27,007 | + 4,380 | 52 | 332,682 | + 36,885 |
| | Beira ... ... | 204 | Feb., 1949 | 104,917 | − 6,180 | 22 | 589,461 | + 9,141 |
| | Egyptian Delta ... | 607 | 10.3.49 | 19.641 | − 593 | 49 | 689.072 | + 98,976 |
| | Gold Coast ... | 536 | Mar., 1949 | 267,847 | + 57,662 | 52 | 2,651.667 | + 634,995 |
| | Manila ... ... | — | — | — | — | — | — | — |
| | Mid. of W. Australia | 277 | Feb 1949 | 26,956 | + 5,101 | 35 | 230.008 | + 45.625 |
| | Nigeria ... ... | 1,900 | Feb., 1949 | 447,782 | + 51,185 | 44 | 5,211,547 | + 897,747 |
| | Rhodesia ... ... | 2,445 | Sept., 1947 | 643.980 | + 102,833 | 52 | 6,787,603 | + 612,938 |
| | South Africa ... | 13,347 | 9.4.49 | 1,452,509 | + 107,243 | 1 | 1,962,214 | + 157,867 |
| | Victoria ... ... | 4,774 | Jan., 1949 | 1,509,601 | + 19,338 | 31 | — | — |

*Receipts are calculated @ 1s. 6d. to the rupee.